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# CLINICAL

## MEDICINE and SURGERY



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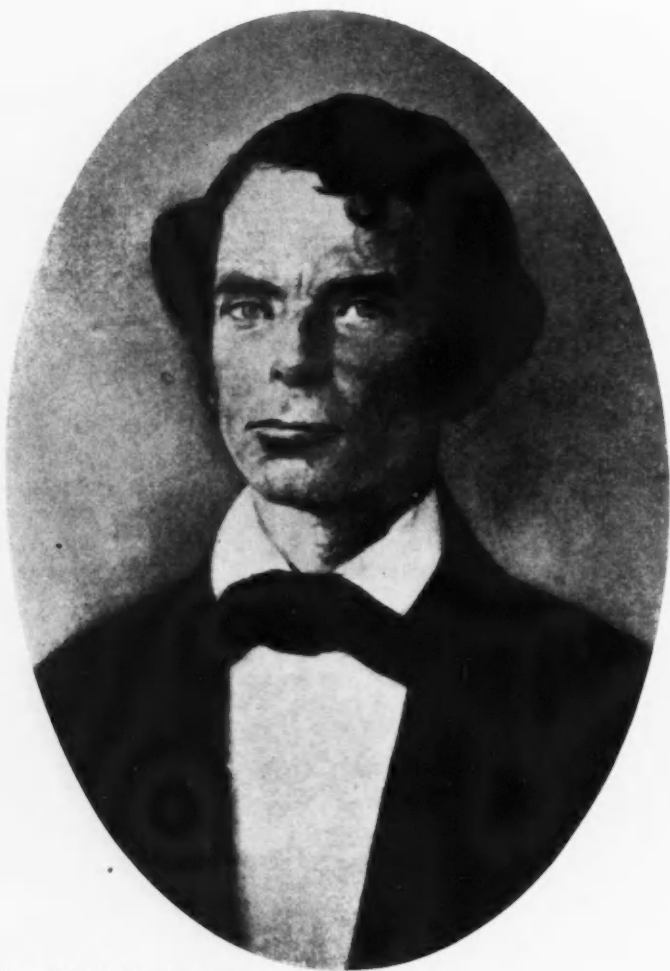
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JOHN WESLEY MONETTE, M. D.



# CLINICAL MEDICINE AND SURGERY

Dr. John W. Monette

**I**N THE histories of the United States which are generally known, little is said about the physicians who played an important part in the development of this country when it was new, and it seems desirable that the medical men of today should become acquainted with some of their hardy, versatile and gifted professional predecessors.

One of these, who is now almost unknown, was John Wesley Monette, whose father also was a physician, and who was born in Staunton, Virginia, April 5, 1803. Shortly after John's birth, Dr. Samuel Monette took his family out into the new western country and settled at Chillicothe, Ohio, where the boy, who was keen and studious, was graduated from the very good Academy there at the age of eighteen years, having laid a sound foundation in history, geography, geology and other natural sciences, and also in theology, as his was a good old Methodist family.

Another move, in 1821, took the family to Washington, Miss., which was then the state capital, where John assisted his father with his practice for a time, and then entered Transylvania University, at Lexington, Kentucky, from which he received his degree in medicine in 1825 and entered regularly upon his professional work.

Young Dr. Monette believed that laziness was a sin, so, while he attended seriously to a practice which made him a relatively rich man, he filled his unoccupied hours by keeping up his cultural studies.

In those days there was plenty of yellow fever in the South, and in 1837 Monette suggested the "ridiculous" idea that it could be controlled by quarantine, and persuaded the authorities to

try it at Natchez in 1841, following which there was no epidemic in that city for ten years or more, though the surrounding towns suffered repeatedly. That established Monette's professional reputation, and he wrote a number of articles, on that and other medical and scientific subjects, as well as delightful satirical essays and even some verse, for the lay and professional journals, including a series which ran in the *Western Journal of Medicine and Surgery* in 1842 and 43. In 1840 a small book of his appeared, entitled "Observations on the Epidemic Yellow Fevers of Natchez and the Southwest from 1817 to 1838."

But though Dr. Monette's fame as a physician was considerable and well deserved, in his generation, it is as a historian that he will probably be longest remembered, for, at the age of thirty, he began the tremendous task of writing a complete story of the history and physical geography of the Mississippi Valley. As the work went on, it became obvious that four large volumes would be required—two of the history and two dealing with the geography.

After thirteen years of labor, the two historical volumes were published, by Harpers, in 1846, and were the first authoritative work on the subject. The section on physical geography, which the Doctor considered the more important, never appeared in print, for he passed to the rest which he must have needed, after his full and active life, before it was fully completed and only a month before his forty-eighth birthday—March 1, 1851.

Dr. Monette's character was decidedly contradictory, for while he was warmhearted, courteous and genial to his large family (he was

the father of ten children) and close friends, he was also reserved, austere, exacting and almost unbelievably strenuous. An ardent religionist, he used neither alcohol nor tobacco and devoted such unoccupied hours as he had to his family and to gardening.

The mortal part of him lies in the family burying-ground of his old home, "Sweet Auburn," where the house in which he lived and worked still stands. It is time that his memory should be resurrected and that his life and accomplishments should become better known to his professional brethren of these later days.

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No work done by any man, however great, will really prosper unless it has a distinct religious backing.—GANDHI.

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#### OBSERVATION AND MEMORY

EVERY day we hear someone (and too often it is ourselves) say, "Your face is perfectly familiar, but your name has slipped my mind." This is generally an inadvertent misstatement of the fact: Not that we do not know the man's name; but that it has "slipped our minds." A thing which was never in cannot slip out!

A sage once admonished, "Say not, 'I do not remember'; say, rather, 'I did not observe.'"

What most of us need is, not so much a course in mnemonics, but a good deal of daily, diligent practice in the simple, but regrettably uncommon, art of observation. "Seeing we see, but do not perceive, and hearing we hear, but do not understand."

Because most people are eye-minded, more information trickles into our consciousness through our eyes than by way of the other sense avenues. We look at a man or a woman, and carry away some sort of a picture, though it is often hazy. We are introduced (frequently by someone who is not, himself, entirely familiar with one or both of the names, and so slurs or mumbles them), and, not having heard the name accurately, we are so afraid of committing a *faux pas* that we do not ask the man what his name is and repeat it after him. Never having known his name, we cannot "forget" it.

Frequently we do a piece of work which is more or less routine with us, and then have to go back and see if we did it, because, at the time of performance, our minds were elsewhere—we were not observing.

We skim over a piece of reading or study with less than half of the mind focused upon it; and, an hour or a day or a week later, have not the remotest idea what it was that we read or studied. This is not failure of the memory;

it is ignorance of and lack of skill in the art of attentive observation.

If we would all devote some time and real effort to fixing the attention rigidly upon any work we are doing or any important occurrence which takes place within the scope of our perceptive powers, we would be surprised at the rate with which the faculty we call "memory" would grow and sharpen.

No one can teach us to observe nor to remember. One may point the way by which those powers can be cultivated, but he who would possess these faculties must develop them by his own efforts. It is worth the time and energy expended, for the man with responsive senses and a disciplined mind lives in a world far larger than that of the slipshod shirker who can never "remember."

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Every natural faculty—and every organic function is such a faculty—by means of exercise, evolution and inheritance, can become an art.—H. VAHINGER.

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#### CHILDREN AND THE ARMY

At first glance it may seem, to some, that the subjects of this editorial have no relation to each other, aside from the fact that April 6 has been designated as Army Day, and May 1 as Child Health Day, so that the two arise for consideration at this time.

The slogan for this May Day is, "Mothers and Babies First," and has much to recommend it, because the mothers of our Land are the source of whatever greatness is in store for us, and the babies are the leaders and teachers and workers of the years to come.

We should give thought, at this time, to all the things we can do to advance the safety and welfare of the mothers and their young children, including improved antepartum, interpartum and postpartum care; improved nutrition, instruction and recreation for the children; and all the other matters which were brought up at the White House Conference a few years ago.

In this study we should not, however, overlook the importance of protecting our mothers, babies and young men and women from the horrors of war. This is as important as any of the other problems.

The only adequate prophylactic against war—until the glad day when fifty-one percent of the world's population is sufficiently civilized to outlaw it entirely—is to maintain a system of national defense sufficiently strong to discourage any prospective aggressor.

So, in arranging better care and education of mothers and children, let us not forget that the

pacifists are constantly trying to hamstring our army (and the navy, too), and that it seems much easier, to pork-barrel politicians, to reduce the necessary appropriations for our national safety than it is to cut down the sources of political patronage and corruption; and let us tell our representatives in the Congress, in no uncertain terms, how we feel about these and other matters which vitally concern the welfare of mothers and babies, as well as the rest of us.

It isn't necessary to know a man's reason if you have acquaintance with his standards. When you know a man's ideals you can forecast his actions.  
—ROBERT QUILLEN.

### BACTERIAL WARFARE

OUR friends, the professional pacifists and the scare-head feature writers, have regularly and consistently played upon the emotions of unthinking and uninformed people by painting fear-inspiring pictures of the horrors of gas warfare.

And then Major General Harry L. Gilchrist took most of the wind out of their sails by proving, after careful investigation, that poisonous gases constitute the most humane effective weapon so far devised. As such, if we are still to have wars (which heaven forefend!), they will probably be used extensively in any major conflicts of the future.

Of late these same classes of people have been harrowing the imaginations of the soft-headed ones by outlining the facinorous possibilities of biologic or bacterial warfare; and Major Leon A. Fox, Medical Corps, U.S. Army,\* has upset the fabrications of those whose living depends upon pacifistic propaganda, in much the same way that Gen. Gilchrist disposed of the gas-warfare ballyhoo.

Sentimental considerations have never, so far, prevented the use of any effective weapon in war. Every such weapon has been employed until something better has been found; and if bacteria can be made effective from a military standpoint, there is good reason to believe that they will be used as weapons. The only question, then, is, are they practicable? Major Fox says no.

The biologic agents available for warfare are: (1) The communicable diseases; (2) other infective agents, such as wound infections; (3) toxic products of bacteria.

The causative organisms of all the communicable diseases are sensitive to heat, cold and drying, so that they could not be distributed by means of shells. Distribution by airplane or by means of carrier pigeons (as fancifully

suggested by Edgar Wallace) would be impracticable in the combat zone, though it might be used, to some extent, against the civilian population, as a factor in "frightfulness."

The chief difficulty, here, is that epidemics depend upon other things besides infection (climate, crowding, fatigue and lowered resistance) and that most of the communicable diseases can be controlled by prophylactic vaccinations or sanitary measures or both. Those which can not be so controlled would be as dangerous to the army using them as to their enemies.

A study of the non-communicable infections, such as tetanus, shows that the one most nearly satisfactory, from a military standpoint, is anthrax. The trouble with this suggestion is that an advancing army could not use it without endangering its own men. It would be of service only in covering a hasty retreat, and under such circumstances would be minimally effective.

The most poisonous substance known is botulinus toxin, and it is true that one airplane could carry enough of this substance to annihilate, not merely the population of a great city, but of the entire world, if it were properly applied. Remember, however, that, during the World War, enough bullets were fired to allow fifty for every man, woman and child on this earth—and most of us are still here.

The gist of the whole matter—which every physician ought to know, so that he can act as a center for the education of the public—is that, at present, there are insurmountable technical difficulties which prevent the effective use of bacteria and other biologic agents in warfare.

The worst sorrows in life are not its losses and misfortunes, but its fears.—A. C. BENSON.

### CAUSES OF ACCIDENTS

WE read a great deal about the appalling loss of life in this country from automobile accidents, and we all realize that something ought to be done about it, but leave the doing to the other fellow.

It is interesting to study the figures of one of the large companies which write accident insurance, analyzing the claims which have been paid during the past five years.

As everyone would expect, automobile accidents stand at the top of the list, in both frequency of occurrence and amount of the claims, in the latter particular being far in the lead, with 45 percent.

\*Military Surgeon, Mar., 1933, p.189.

But as to frequency, some rather surprising things appear. People are prone to think of the dangers of travel, especially travel by air, but the whole list of accidents occurring from going about on railroads, elevated, street and subway cars and on passenger boats was only 4.7 percent of the total. As for aviation, only 23, out of a total of 139,021 accidents, were due to that cause.

Next in frequency to automobile accidents (which constituted 31 percent of the total) were those which happened to people who were staying quietly at home (27.3 percent). Of these, more than 4,000 were due to being cut with sharp instruments (including broken glass) and more than 6,500 to falls on floors, stairs and steps; while only 69 were the result of assaults, which figure so largely in the newspapers.

Third in frequency on the list come accidents due to sports and recreations, with 20.5 percent. Here, again, are several surprises. Most people think of football and boxing as being rough and dangerous—almost brutal—sports; and of golf and walks in the woods and fields as being mild and innocuous pastimes. Such will be astonished to learn that football and boxing, together, furnished only 628 out of the 22,185 accidents in this class; while golf showed 2,462 and jaunts in the country 2,341. Swimming, of course, stood high on the list (2,301), but baseball was even more dangerous (2,612). Even the supposedly mild games of tennis and squash furnished 1,316 victims.

Consideration of figures like these show us how entirely wrong public opinion may be and into what serious mistakes in thinking we may be carried, if we permit ourselves to be swept along by the stream of the consensus of the ignorant and prejudiced.

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To live to a ripe old age, acquire a chronic ailment and take care of it.

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Blessed is the man who believes in his fellows, for it is more blessed to be deceived in some things than to be suspicious of all things.—From "John the Unafraid."

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#### BIRTH CONTROL AN OLD PROBLEM

WE KNOW, of course, that contraceptive measures of a sort were practiced in Old Testament times, and probably long before that—even as long ago as 1850 B.C., as related in the article by Dr. Stopes in our issue for December, 1931—and that mechanical and chemical contraceptives were in use (rather unintelligently, to be sure) at least as early as the first quarter of the nineteenth century.

An interesting bit of the earlier propaganda in this line has come into our hands recently, in the form of Vol. I, No. 1, of *Henry's Private Adviser*, a four-page, newspaper-type publication, dated Feb. 1, 1851, chiefly intended, apparently, to boom the sales of, "Reproductive Control; or a Rational Guide to Matrimonial Happiness. The Only Preventive in Harmony with Nature, Requiring no Sacrifice of Enjoyment, of Money, or Health or of Moral Feelings. Reproductive Control, the only Antidote to the Early Decay of American Women and the Increase of Poverty—The Chart of Life: or the True Theory of Reproduction with Rules Respecting the Control of Offspring." By J. Henry, M.D. (Price \$1.00). This fearsome title seems, generally, to have been shortened to "The Chart of Life."

In the absence of the book, one cannot speak with certainty as to its contents, but the articles in the *Adviser* indicate that Dr. Henry's method was the observance of a "safe time," which he felt he had worked out with precision.

It is interesting to note that this "safe time" idea, which has been disappointing people for many years, has been brought into prominence again in a little book by Dr. Leo Latz ("The Rhythm," reviewed in CLIN. MED. & SURG., March, 1933, page 196), who has based his theory upon the most modern ideas of the reproductive cycle.

It is to be hoped that a reliable physiologic or biologic method for controlling reproduction will soon be worked out—recent articles along this line are encouraging. Meantime, the highest degree of success seems to attend the use of a combination of the mechanical and chemical methods, as recommended by the American Birth Control League.

# LEADING ARTICLES

## Obstetric Analgesia and Amnesia, with Special Reference to the Barbiturates\*

(Report of 100 Cases)

By R. O. Goehl, M.D., Grand Forks, No. Dak.

Red River Valley Clinic

IN the past century, many have made persistent attempts to accomplish the relief of pain in labor, the first being introduced by Sir James Y. Simpson, in 1847, when he used ether, and later chloroform. In 1880 and '81, nitrous oxide with oxygen was first introduced by Kilowitch and Winckle, and in 1902, Steinbuckel recommended the use of scopolamine and morphine in obstetrics, which was popularized in 1907, by Gauss. In the past decade, the synergistic rectal use of ether and oil (later combined with a barbiturate), according to the principles first advocated by Gwathmey, in 1924, has been used with some success. More recently there has been further investigation with scopolamine and morphine, and new work with the barbiturates. Schwarz and Krebs<sup>1</sup> report extensive work with scopolamine and morphine in combination, while VanHoesen<sup>2</sup> and Somerville<sup>3</sup> each have studied a series of cases using scopolamine alone, except for the supplementary inhalation anesthesia used at the end of the second stage.

Work where pentobarbital sodium (Nembutal) or Sodium Amytal was used, in combination with scopolamine and opiates, has been reported by Moore,<sup>4</sup> Graham,<sup>5</sup> Cohen,<sup>6</sup> Bristol,<sup>7</sup> and McDonald.<sup>8</sup> Sodium Amytal alone was used in a series of cases by Mendenhall et al.,<sup>9</sup> in another by Hamblen and Hamblin<sup>10</sup> and also by Morehead and Mussey.<sup>11</sup> Hole<sup>12</sup> and other German investigators show some enthusiasm for Pernocton; Doyle<sup>13</sup> favors morphine and scopolamine, preceding nitrous oxide; while Axelrod<sup>14</sup> reports work with barbiturates in a rectal ether-oil mixture. Recently Ruth and Paxon<sup>15</sup> reported a series of cases in which they used Sodium Amytal preceding nitrous oxide, with favorable results.

### PHARMACOLOGY OF THE DRUGS

The nucleus of a barbiturate is made up of urea and malonic acid, and the many derivatives differ only in their side-chains. In 1903, the first of these products, barbital (Veronal)

was introduced; in 1912, phenobarbital (Luminal); in 1914, diallyl barbituric acid (Dial); in 1923, iso-amyl-ethyl barbituric acid (Amytal); in 1924, brompropenylisobutyl barbituric acid (Pernocton); in 1929 the sodium salt of iso-amylethyl barbituric acid (Sodium Amytal); and recently Nembutal or pentobarbital sodium—sodium ethyl (1 methyl) butyl barbiturate—was introduced.

Lundy<sup>16</sup> mentions Nembutal (pentobarbital sodium) as being one of the "short acting" barbiturates; that is, the drug is more toxic, therefore a smaller dose is necessary, and consequently a more rapid elimination, with a shorter duration of the therapeutic effect, results. Also, in the same article, Lundy states that with this drug there is less tendency towards extreme restlessness and delirium.

The barbiturates are absorbed and act as barbiturates on the central nervous system. Experimental work has shown that they are eliminated, principally by the kidneys, without detrimental effects on these organs. With their administration there is some slight depression of respiration and a tendency to a fall of blood pressure and body temperature. No injurious effects are noticed on liver function, alkali reserve, or blood concentration.<sup>17</sup> Furthermore, Sodium Amytal and Nembutal are excreted more rapidly than some of the other barbiturates.<sup>18</sup>

The dosage of barbiturates varies a great deal in recent reports, according to the therapeutic effect desired, but we know that, if we remain within the limits of 15 to 25 grains (1.0 to 1.65 Gm.) of Sodium Amytal or 10 to 15 grains (0.65 to 1.0 Gm.) of Nembutal within a period of about 12 hours, we are free from any danger.<sup>16, 18</sup> I frequently give 6 grains (0.4 Gm.) of pentobarbital sodium or 9 grains (0.6 Gm.) of Sodium Amytal at one dose, without any untoward effects.

It will be noted that we have used scopolamine in doses larger than are generally recognized, but this is founded upon good authority. Schwarz and Krebs<sup>1</sup> have conducted extensive experimental work along this line, both in laboratory and clinic. They have ascertained

\* From the Maternity Department of the Louisville City Hospital and Medical School, Louisville, Kentucky.

that scopolamine, in doses considerably larger than those used in twilight sleep, have no material effect on blood pressure or on respiration; also the well known paralyzing action of scopolamine on the peripheral nerve endings seems to have no serious by-effect in twilight sleep; it usually manifests itself by dryness of the mouth and throat. They also agree that the opium alkaloids, and not scopolamine, are the drugs likely to interfere with prompt establishment of respiration in the new-born. Somerville and Van Hoosen, in their series, report no ill effects from large doses of scopolamine.

#### METHODS USED

In this method of pain relief I was quite sure that the patient was definitely in labor before any medication was given. In most cases this was not difficult, because of the fact that so many patients did not come to the hospital until labor was fairly well advanced. Contractions were occurring every 3 to 5 minutes, and the cervix was 2 to 3 finger-breadths dilated and  $\frac{1}{2}$  to  $\frac{3}{4}$  effaced. After the medication was begun, an attempt was made to place the patient in a quiet, darkened room with her eyes covered, a student remaining with the case. This treatment was not entirely satisfactory, because of the lack of proper rooms for the elimination of confusion. When the patient was ready to deliver, she was taken to the delivery room and her medication was usually supplemented by a small amount of chloroform or ether during the last part of the second stage.

It was not my purpose to promote complete amnesia in all cases, but I desired to relieve the patients of their pain. When a large enough dose was given, with the expectation of securing amnesia, I usually obtained it. Most of the barbiturate was administered orally, but in some cases, especially if nausea and vomiting were present, it was given intramuscularly. The rectal route may also be used with success.

If the patient was complaining and suffering much, she was given a large dose of the drugs, which would perhaps carry her through her labor. If not complaining a great deal, a smaller dose was given, followed by more medication later.

There were 24 cases that had  $\frac{1}{4}$  to  $\frac{1}{2}$  grain (8 to 10 mgm.) of morphine,  $1\frac{1}{2}$  to 15 grains (0.1 to 1.0 Gm.) of Nembutal and 1/150 to 1/50 grain (0.5 to 1.3 mgm.) of scopolamine, in variation. (I recommend the ampule form of scopolamine—Roche.) Here the initial dose of Nembutal was usually  $1\frac{1}{2}$  to 3 grains (0.1 to 0.2 Gm.), but more was given later. Twenty-four (24) had 6 grains (0.4 Gm.) of Nembutal and 1/100 grain (0.6 mgm.) of scopolamine. Nineteen (19) had Nembutal alone, in the amount of 3 to  $7\frac{1}{2}$  grains. (0.2 to 0.5 Gm.)

There were 15 cases in which Sodium Amytal was used, in place of Nembutal. Here I used 9 grains (0.6 Gm.) of Sodium Amytal, and 1/100 grain (0.6 mgm.) of scopolamine, except for slight variations. In some instances the patients were started on 3 grains (0.2 Gm.) of Sodium Amytal, the remainder of the dose being given an hour or two later.

The other few cases, not included above, had variations of Nembutal, scopolamine and morphine, as for example, one prolonged case of right occipitoposterior presentation had 6 grains of Nembutal, later  $7\frac{1}{2}$  grains and still later, at intervals, three  $\frac{1}{4}$  grain (16 mgm.) doses of morphine. Three other cases of somewhat lengthened labor had 9 grains of Nembutal and two 1/100 grain doses of scopolamine.

#### ANALYSIS OF CASES

In this group of 100 cases there were 59 primiparas and 41 multiparas, of which 58 patients were white and 42 were colored. The youngest patient was 15 years of age and the oldest 37 years. The average blood loss per patient was 261 cc. The largest blood loss was 1,200 cc. and the smallest 50 cc. The average duration of the period elapsing from the time medication was first administered until the delivery was 5 hours and 36 minutes. The longest period was 25 hours and 15 minutes (this occurring in the axis-traction case of this series); the shortest period was 40 minutes. The great majority of these cases were delivered from three to five hours after the medication was first started.

In studying the degree of pain relief I have used three classes. In Group I are those who had only partial relief of their pain; Group II, those who had periods of amnesia and good analgesia; Group III, those who had complete amnesia from a period shortly after giving the medication until after the delivery. There were 25 patients in Group I; 30 in Group II; and 41 in Group III.

In a similar manner I classified the patients as to their cooperation and restlessness. In Group I are those patients who cooperated well at delivery and experienced no restlessness; Group II, those who became slightly restless, some of them to the degree of disarranging the drapes at delivery; and Group III, those who became rather violent and very disagreeably uncooperative. There were 59 cases in Group I; 32 in Group II; and 9 in Group III. In other words, about one out of every ten patients was definitely objectionable, from the standpoint of restlessness.

In an attempt to study the effect of the medication on the respiration of the newborn, I classified the babies as to the degree of asphyxia neonatorum. In Group I were the infants that breathed spontaneously immediately following expulsion; Group II, those that required some additional stimulation—usually a warm-water bath; and Group III, those that required a warm-water bath and alpha-lobeline in order to stimulate respiration. In Group I, there were 78 infants; in Group II, there were 12; and in Group III, there were 10.

There were 13 operative deliveries in this series; the remaining 87 cases having been spontaneous deliveries. Three (3) of the operative cases were low-forceps deliveries, solely for demonstration purposes, while the other 10 cases had definite indications for interference, such as contracted pelvis, fetal distress, inertia and failure of the cervix to dilate satisfactorily or the rotation of a posterior position. In these

10 cases there was one version and extraction, one axis-traction forceps, one ordinary mid-forcep, and 7 low-forceps deliveries.

#### RESULTS AS TO CLASS OF SATISFACTION

In an attempt to rate these cases according to desirability of results, I have used four classes; excellent, good, fair and poor. There were 18 excellent results; 46 good; 4 poor; and the remaining 31 cases, fair. In order to have a case rate as excellent, it was necessary to fulfill the requirements of an ideal labor; namely, to be safe for both mother and child and to satisfactorily relieve or cause forgetfulness of pain, without unduly exciting the patient and without retarding the progress of labor.

The "good" cases were satisfactory, but were not ideal, in that there may have been some slight restlessness, only partial relief, short duration of the relief or some asphyxia neonatorum. The cases classed as "fair" had some of the above features in a more marked form; they included the operative deliveries. The four "poor" cases were unsatisfactory—one because of extreme restlessness; the second because of restlessness and uncooperation in the second stage, necessitating a forceps delivery; the third because of its being one of the first cases, when we were too hesitant about giving further medication for relief after the patient failed to make satisfactory progress.

#### DISCUSSION

In this study of pain relief it was gratifying to have the patients express their satisfaction after the labor had ended. In all cases we did not attempt to secure complete forgetfulness of pain; however, when sufficient medication was given, amnesia usually resulted.

Moore, McDonald, Mussey, Graham and others have reported good results in obstetric analgesia and amnesia by the use of barbiturates and scopolamine. In the 100 cases reported by Bristol as having had 9 grains (0.6 Gm.) of Sodium Amytal and 1/100 grain (0.6 mgm.) of scopolamine, and sometimes more, 84 had complete amnesia. This was about the incidence of amnesia in our cases when complete forgetfulness was expected. If the patients were suffering markedly upon admission and 1/100 grain of scopolamine and 6 grains (0.4 Gm.) of Nembutal were given, complete amnesia usually resulted, which lasted through the remainder of the labor. If the patient was having only mild pains, we sometimes gave 3 grains of Nembutal and, in an hour or two, 3 or 6 more grains, with 1/100 grain of scopolamine. In cases where Nembutal alone was used, we obtained relief of pain, but seldom any amnesia.

The only objection to this method of pain relief is the restlessness which sometimes occurs. This is sufficient to make one wish, sometimes, that one had not used the medication; however, one is tempted to overlook that feature when, the next day, the patient states that she does not recall the labor or the severe pain.

In most of the literature on this subject the investigators do not, for the most part, refer to restlessness. Graham mentions it in the report of his series. Hamblen and Hamblen definitely speak of the restlessness with Sodium

Amytal, as does Mendenhall, et al. Because of this feature, it is necessary to consider the case and circumstances before using the method. If one has an intelligent patient in a hospital, a quiet room, trained attendants, cooperative relatives of the patient and time for fairly close observation, one can carry out the procedure quite successfully. We must also bear in mind that some patients are difficult to control, no matter what is given, and that even without medication they are very uncooperative. Our best results occurred with intelligent and reasonable patients and I am inclined to believe that, had our patients been of a better class and our rooms more quiet, the incidence of restlessness, although not marked, would have been diminished.

In all pain relief, when sufficient sedative is given to cause amnesia, the patient is placed in the first stage of anesthesia and rationality is lost. If a severe stimulus such as pain then intervenes, and the patient is of the proper psychic complex, restlessness is inevitable. Until we find something to subdue this agitation without stopping labor, or something to mask the pain stimulus, we will be confronted with occasional restlessness in obstetric cases.

The age of the patient had no relation to restlessness. It occurred to some degree with all variations of dosage, but was present in an objectionable manner only in those cases with amnesia. In some cases we tried further medication, in an attempt to subdue the restlessness, but this was not entirely satisfactory. I believe that much of this uncooperation of the patients could be avoided if forceps were used at the vaginal outlet, because some of our restless patients became so at the perineal stage.

In the analysis of these cases we found no definite indication of a slowing of labor; however, a few cases seemed to indicate poor progress as a result of the medication, explained only from the standpoint of inertia. One patient who received 1/150 grain (0.4 mgm.) of scopolamine, 1/2 grain (16 mgm.) of morphine and 3 grains (0.2 Gm.) of Nembutal; another who had 1/100 grain (0.6 mgm.) scopolamine and 6 grains (0.4 Gm.) of Nembutal; and a third who had 1/100 grain scopolamine and 3 grains of Nembutal, had a long second stage of labor, and all were finally delivered by a low-forceps operation. This, of course, is objectionable, from the teaching standpoint; but, from the standpoint of the specialist, it is not an especially objectionable feature. There were also 4 cases in which further medication was withheld, because of a feeling that it was retarding the labor in the first stage, but here we were being over-conservative in our experimentation. Several patients did show a slowing of contractions for a short time after the medication was given, but labor progressed satisfactorily.

Caldwell,<sup>20</sup> of Sloane Hospital, New York, states that the barbiturate, Pernocton, does not interfere with contractions; while Hole reports that there is some tendency toward slowing. Morehead and Mussey say that large doses, given early, tend to stop labor, which is in accordance with my experience. Hamblen and Hamblen report no slowing of labor with Sodium Amytal; while Mendenhall, et al., suggest a little slowing. Graham, in his experience with

Nembutal, does not mention this phase of the work. Drabkin,<sup>21</sup> et al., report that experimental uterine contractions are not affected by barbiturates. Moore merely suggests a slowing or stopping of labor, especially if a large dose is given early. Bristol, in an analysis of 100 cases, concludes that a Sodium Amytal and scopolamine combination does not retard labor.

This variation of opinions, regarding the effect of barbiturates on uterine contractions, warrants the thought that there is a strong possibility of the slowing of labor. From my experience, I feel sure that, like all other sedation, there is some tendency toward retardation of labor, but it is practically negligible when the medication is given according to the principles mentioned in this paper. I think that the barbiturates and scopolamine have less tendency to retard labor than other sedatives, and, if one wished to do so, one could use quinine to stimulate uterine contractions, as does Gwathmey<sup>22</sup> in his rectal ether-oil technic. I have not employed this suggestion.

The matter of asphyxia neonatorum is one to be seriously considered in any type of medication during labor. Moore reports no asphyxia where only scopolamine and barbiturates, with some general anesthetic, were used. Bristol, Hamblen and Hamblin, Graham, and Mussey, also report no asphyxia of the newborn in their series. In a group of cases where Pernocton was used, Hole reports some cases of apnea of the newborn. In my experience I have found that most babies immediately breathed spontaneously, even in cases where medication was given one or two hours before the delivery. Of the 10 infants in Group III, 4 were from mothers who had morphine included in their medication; four were operative deliveries; and two were from patients who had received a large amount of general anesthetic (one by accident). I am inclined to agree with the opinion which is mentioned by Moore, Cohen, and by Schwarz and Krebs, that fetal asphyxia is much more likely to occur where morphine is given. In this series, all of the infants that did show some depression of respiration at birth were resuscitated satisfactorily.

Hypertension or toxemia are not contraindications for this method. Several such cases were included in this series, with good results. We have also had excellent results with the use of Sodium Amytal and Nembutal in our cases of hyperemesis and eclampsia.

#### CONCLUSIONS

1. Pentobarbital Sodium (Nembutal), or Sodium Amytal, and scopolamine may be used safely in procuring relief of pain in obstetrics. When Sodium Amytal is used in place of Nembutal, a larger dose must be employed.
2. Objectionable restlessness sometimes results from these methods.
3. The blood loss is not increased.
4. The progress of labor is not appreciably affected.

5. The incidence of asphyxia neonatorum is not increased by these methods.

6. The most preferred initial dosage for definite relief of pain and amnesia, in a patient who is having definite contractions every 3 to 5 minutes, is 6 grains (0.4 Gm.) of Nembutal and 1/100 grain (0.6 mgm.) of scopolamine.

7. There is no increase of operative deliveries with this type of medication.

8. Barbiturates have a definite relaxing effect upon the cervix and the patient in general.

#### BIBLIOGRAPHY

- 1.—Schwarz, O.H. and Krebs, O.S.: Scopolamine-Morphine Seminarcosis: Its Use in the Fourth Thousand Deliveries in Barnes Hospital. *Am. J. Surg.* 33: 98-100, Oct., 1925.
- 2.—Van Hoosen, Bertha: Scopolamine Anesthesia in Obstetrics. *Anesth. and Analg.* 7: 151-153, May-June, 1928.
- 3.—Somerville, Asbury: Scopolamine Amnesia in Labor. *J. Canad. Med. Assn.* 24: 818-821, June, 1931.
- 4.—Moore, J.H.: Observation on the Relief of Pain in Labor. *J. Lancet*, 51: Oct., 1931.
- 5.—Graham, J.D.: Nembutal in Obstetrics. *Journal-Lancet*, 51: 470-472, Aug., 1931.
- 6.—Cohen, J.P.: Symposium on the Relief of Pain During Labor. *New England J. of Med.* 205: 280-287, Aug., 1931.
- 7.—Bristol, D.J.: (Same as #6)
- 8.—McDonald, W.J.: (Same as #6)
- 9.—Mendenhall, A.M. et al.: The Use of Sodium Amytal in Obstetrics. *Am. J. Obst. & Gyn.* 18: 406-415, Sept., 1929.
- 10.—Hamblen, E.C. and Hamblin, D.O.: Oral Administration of Sod. Amytal in Obstetrics. *Am. J. Obst. & Gyn.* 21: 715-718, March 1931.
- 11.—Morehead, D.E. and Mussey, R.D.: Oral Use of Small Doses of Sodium Amytal in Obst. Analgesia. *Proc. of Staff Meetings of Mayo Clinic*, 5: 278-281, 1930.
- 12.—Hole, W.: Pernocton Twilight Sleep in Obstetrics. *Zentralblatt für Gynakologie*, 53: 974-980, April, 1929.
- 13.—Doyle, F.W.: Gas-Oxygen Anesthesia in Obstetrics. *J. Anesth. & Analg.* 10: 67-72, March-April, 1931.
- 14.—Axelrod, M.L.: Rectal Installation of Certain Barbiturates in Ether-Oil-Quinine for Obstetric Analgesia. *J. Anesth. & Analg.* 10: 64-66, March-April, 1931.
- 15.—Ruth, H.S. & Paxson, N.F.: Obstetric Anesth. & Analg. with Sodium Amytal and Nitrous-oxide-Oxygen. *Am. J. Obst. & Gyn.* 23: 90-96, Jan., 1932.
- 16.—Lundy, J.S.: Intravenous Anesthesia. *J. of Anesth. & Analg.* 9: Sept.-Oct., 1930.
- 17.—Bourne, W. et al.: The Effects of Amytal on Liver Function, Urine, Alkali Reserve, etc. *J. Surg. Gyn. & Obst.* 51: 356-359, Sept., 1930.
- 18.—Lundy, J.S. & Osterberg, A.E.: Review of the Literature on the Derivatives of Barbituric Acid. *Proc. of Staff Meetings of Mayo Clinic*, 4: 386-400, December, 1929.
- 19.—Krebs, O.S.: Scopolamine & Morphine in Obstetrics. *J. Mo. State Med. Assn.* 205: 485-490, October, 1929.
- 20.—Caldwell, W.E.: Dr. Maxwell's Article, "Pernocton in Labor". *Am. J. Obst. & Gyn.* 22: 933-939, December, 1931.
- 21.—Drabkin, D.L. et al.: The Effect of Amytal Anesthesia on the Uterus & its Use in Obstetrics. *Am. J. Med. Sc.* 178: 379-385, July-Dec., 1929.
- 22.—Gwathmey, J.F.: Obstetrical Analgesia. *Surg. Gyn. & Obst.* 51: 190-194, August, 1930.

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# Anterior Pituitary Therapy Of Premature Alopecia

## (A Preliminary Report)

By Bengt Norman Bengtson, M.D., Maywood, Ill.

HAVING observed hair follicle stimulation in a small group of sixteen cases afflicted with alopecia areata and alopecia totalis, on prolonged anterior pituitary therapy,<sup>1</sup> I began a study of a series of 58 unelected patients with premature alopecia on a similar routine. The cases admitted were divided into: (1) those in which the baldness was thought to be a hereditary characteristic; and (2) those whose hair loss was believed to have resulted from seborrhea or pityriasis. These latter were further subdivided into groups of grades one to four, depending on amount of seborrhea and associated dermatitis. The age of the youngest patient was sixteen and of the oldest fifty-one. The degree of baldness varied from moderate thinning to severe alopecia circumscripta of twenty-five years' duration.

The results herein recorded cover a twelve-month period of observation and, while final conclusions cannot yet be reached, sufficient evidence has thus far been obtained to justify an opinion as to the efficacy of this particular therapy in premature, pre-senile and seborrheic alopecias. Most of the patients were given a complete physical and laboratory examination, consisting of preliminary and subsequent observations on blood pressure, pulse, height, weight, basal metabolism, blood counts, and prostatic findings. With these notations prior to and after therapy, it was hoped, in addition, to observe any detrimental influences that might occur from prolonged daily injections of the whole anterior hypophysis.

The therapy consisted of injections of anterior pituitary substance (Lilly), intramuscularly, in doses varying from 1 cc. three times weekly to 2 cc. five times weekly. Rest periods of one week were allowed every two months. In some cases thyroid substance was added, to ascertain any possible synergistic influence, such as was observed in the treatment of certain universal alopecias.

Forty-one (41) developed lanugo, 17 showing no response. Twenty-five (25) evidenced new terminal hair stimulation, while 33 demonstrated no obvious hair growth or extension. The lanugo was of good quality, in some instances attaining an inch in length, but the terminal hair growth in the average case was disappointing, inasmuch as excellent results were observed in but isolated instances, whereas the majority, while suggestive and interesting, could not be called gratifying. Body hair (chest, axillae, pubes, beard) was definitely stimulated to stronger growth and spread in 24 of the series, with 33 claiming no change and no record in one.

The blood pressure was lowered in 29; not affected in 8; increased in 18; with no record in 3. It was interesting to note that, of those whose blood pressure decreased, 15 had had moderate to severe hypertension, which de-

creased slightly to moderately under therapy, the remainder evidencing only physiologic variations. In those whose blood pressure was raised, 7 previously had hypotension.

Easy fatigability, a prominent symptom in some of the subjects of this series, was lessened in 22; not influenced in 2 (though a complaint); not a complaint in 22; and with no record in 12. Constipation was bettered in 5

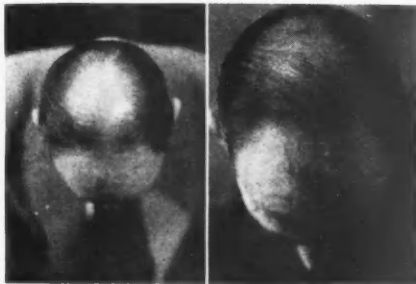


Fig. 1:—Patient R.S.S. Left, Dec. 3, 1931; Right Apr. 7, 1932.

of the series and not improved in 2. A persistent acne simplex disappeared in one case after twenty injections.

Increased sex potency, desire and capability was noted by 32 of the series, with no change in 26; but this observation, being subjective, might have been chiefly psychic in character. The basal metabolic rate tended mildly towards stabilization of the oxygen-carbon dioxide ratio. This was particularly true in those whose basal rates were below minus twenty. One with a basal rate of plus ten increased to plus thirty-two and therapy in this instance was discontinued.

The hair became glossier (oilier) in 11 of the series. The weight increased in 37; decreased in 10; and was unchanged in 6; with no record in 5. The weight increased in those who were underweight and decreased somewhat in those in whom it was in excess.

Chronic headaches were improved in 3 and disappeared in one of the series.

Pityriasis was present in 34 of the series, but did not seem to be an inhibitor to hair stimulation resulting from hypophyseal injections, unless complicated by seborrhea steatosa, in which the deterrent influence was solely mechanical. The blonds showed less obvious stimulation than did the brunets, relative to both head and body hair results.

The prostate was apparently not influenced in any of the series, relative to hypertrophy.

### COMMENT

It was not presumed that any of these patients were hypopituitary types. Instead, therapy was



Fig. 2:—Patient E.M.S. Left, Sept. 25, 1931; Center, Nov. 24, 1931; Right, May 20, 1932.

begun because: first, hair growth had resulted from a prolonged series of injections of the substance of the anterior hypophysis in a small previous series of cases of alopecia areata and totalis; second, on the premise that, if the hypophysis cerebri is a mesenchymal stimulant,<sup>2</sup> in which is included the hair papillae, it could be presupposed that continued injections of anterior pituitary might influence the state of health of the mesodermal hair papillae and thus, indirectly, the hair follicle; third, the possible theoretic consideration that premature hair-fall might be evidence of a generalized lessening of the functions of the endocrine system, of which the hypophysis, because of its embryo-hormonic position, stands out predominantly, as a possible etiologic influence.

The observations herein noted, on hair growth from continued injections, suggest an influential relationship of the anterior pituitary on mesodermal hair papillae; and the additional benefits obtained, relative to weight and blood-pressure changes, and subjective feelings of betterment, physically and sexually, might lead to the conclusion that a lessening endocrine function and falling hair might be associated. The additional use of thyroid substance showed no synergistic influence in this series.

I believe that present preparations, while able to stimulate the hair papillae, resulting in lanugo and infrequent true terminal hair stimulation, are, as yet, of no practical or commercial value in alopecia prematura. However, it seems probable that increasing knowledge of the physiology

of the pituitary gland and a better knowledge of manufacture, or a further separation of its various hormones, will eventually produce that substance in which greater specificity of action on hair stimulation will be noted in alopecia prematura.

#### CONCLUSIONS

1.—The results obtained in this group, though not startling, seem to demonstrate a stimulative influence of the anterior hypophysis on mesodermal hair papillae in premature alopecias.

2.—The presence of pityriasis capitis and seborrhea, in this series, did not seem to be detrimental to the hair stimulation by pituitary substance, other than by influences resulting from mechanical crusting.

3.—Pituitary therapy in premature alopecias, while interesting and suggestive in these preliminary observations, I believe is not yet practical nor fitted for generalized use, until either more potent or physiologically active preparations are manufactured.

#### BIBLIOGRAPHY

- 1.—Bengston, B.N.: Pituitary Therapy of Alopecia. *J.A.M.A.* 97: 1355-8, Nov. 7, 1931.
- 2.—Moehtig, R.C.: Endocrine Correlations. *J. Lab. & Clin. Med.* 16: 118, Nov., 1930; Pituitary Factor in Arteriosclerosis. *Arch. Int. Med.* 4: Dec. 1930; Pituitary Gland and Suprarenal Cortex. *Arch. Int. Med.* 44: 339-43, Sept., 1929.  
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#### PHYSICIAN AND PATIENT

One of the unfortunate results of the enormous growth of science is that the public has come to feel that medicine today is completely scientific and completely competent to solve all problems of disease. This is not true. There are many conditions which are beyond control. Until the time comes when all these things are settled and all the problems are thoroughly solved, and there is a definite scientific remedy for every known condition, the personal relationship between physician and patient will have to continue and be maintained.—DR. LOGAN CLENDENING, before the Chicago Medical Society.

# Serum Treatment of Mendelian Hemophilia\*

## (A Case Report)

By Emilian O. Houda, M.D., Tacoma, Washington.

**I**DIOPATHIC hemophilia, a hereditary bleeding disease, characterized by prolonged and exanguinating hemorrhage from minor cuts or spontaneously, is a mysteriously intrinsic disease, whose etiology is admittedly unknown. Many theories have been advanced regarding its cause, but the most unjust hypothesis, which invidiously insinuates a syphilitic taint transmitted from ancestors, has about as much foundation of fact as that the moon is made of green cheese. That its cause is transmitted through immediately related bloods, cannot be questioned. Nevertheless, like all speculative theories, regardless of how they may be viewed by authority, truth in demonstrable fact makes their yesterdays quite impossible.

As a singular, though serious, anomaly to those afflicted, hemophilic bleeding is much more common than might be inferred from the publicity given to a few cases of note, such as that of the late Czarevitch of Russia and the Infanta of Spain. There is no doubt that every large city, at least, has typical cases of this familial disease. While the typical mendelian type which is connoted with a familial history is not common, bleeders, due possibly to the same cause or one closely related to it, are not uncommon. However, both are amenable to a like management.

Treatment is based upon serologic principles and was originally applied in the handling of the acute types of bleeding, such as purpura hemorrhagica of infectious origin. It was later deduced that all bleeders might be effectively treated in like manner. Had it not been for the observations which were made in the commoner forms of bleeding, this article could not have been written.

There is no desire to excite the usual polemic controversies that dissemble, only, and otherwise contribute nothing. The ultimate objective of any investigation, even in every clinical examination of a patient, is, what value is there in the facts thus revealed to those afflicted? While certain postulates are expected to be satisfied to prove and establish the primary cause of a disease, in this instance, for various reasons, it is not as yet possible to satisfy them. It is not possible to cultivate the virus of hemophilia on artificial culture media. Therapeutic empiricism, therefore, is justified by the results obtained in bleeders, by the use of an effective agent which is otherwise harmless.

### AUTOGENOUS ANTIGENIC SERUM

There is no claim of originality in the use of autogenous serums per se, but a degree is claimed in the following: First, the demon-

stration of minute and very active coccoid bodies in the blood serum of bleeders; second, an increase of this virus is observed after incubation of such blood serums; third, attenuation or inactivation of this virus, by heating the serum, thereby converting the contained living virus into an effective antigen, or vaccine, suspended in otherwise useless serum; fourth, subcutaneous injections of such serum, which, for lack of a better name, is called autogenous antigenic serum, is effective in the cure of bleeders in a relatively short space of time.

Necessarily, a most careful aseptic technic is used in collecting blood, to preclude the ever-present possibility of contamination. Such serum was effectively used in a typical case of mendelian hemophilia—the first one known to have been thus treated and clinically cured.

### CASE REPORT

A young man of 28 years, whose maternal grandfather and granduncle died of hemophilic bleeding, enlisted in the navy during the War. By concealing his affliction, through silent evasion, he "got by" medical examiners. On conclusion of the War, he deferred a discharge with a disability, pending a possible cure. For a period of eighteen months, he was under the observation of naval surgeons, who incriminated his tonsils, as contributing factors at least, and an opportune time was sought to remove two large and obviously infected organs. In spite of various treatments, his blood coagulation time was never short enough to permit a safe tonsillectomy.

At my first examination, the coagulation time was over twenty minutes. Aside from large and notably infected tonsils, there was nothing wrong with him, except a peculiar pallor.

Blood was withdrawn from a vein and injected into each of two 60-cc., sterile ampules, which were promptly glass-sealed and placed in the incubator. After twenty-four hours of incubation, the serum was segregated in two ampules and these were glass-sealed. One ampule of this serum was inactivated for immediate use, by rotating it in a water bath, to prevent marginal coagulation, at a temperature of 80 degrees Centigrade, for sixty seconds, and then promptly cooled in a cold-water bath. The second ampule was incubated until required, on the seventh day.

The inactivated serum of the first ampule was injected subcutaneously, in three doses of 5, 6 and 8 cc., respectively, at 48-hour intervals. The second ampule was administered in doses of 6, 7 and 8 cc.

On the twelfth day (the day after the sixth dose), the coagulation time was 7½ minutes—the lowest it had ever been observed. Being well

\*Received for publication, April 4, 1932.

informed about his illness, the patient wished to have his tonsils removed immediately, but the hour for the tonsillectomy was deferred, pending further observations.

After an interval of ten days, a second course of serum was administered, with similar preparation, but given in three doses of 10 cc. each. The final injection was followed by a clotting time of four minutes.

Forty-eight hours after the last dose, the tonsils were removed under ether anesthesia. Primary bleeding was practically nil, and no secondary bleeding occurred. There was no

postoperative attention, except a diet with plenty of milk, to which lime-water was added.

Four months later, the clotting time of his blood was at the remarkably low point of one and one-half minutes, and his hemophilia was a thing of the past. Naturally, as might be expected, his general health improved. Unfortunately, after a year free of bleeding, he was accidentally killed by multiple fractures of the skull, and further observations were thus interrupted.

Fidelity Bldg.

## Calcium As An Antidote In Poisoning

By Edward Podolsky, M.D., Brooklyn, N. Y.

SEVERAL years ago Karl Mayer<sup>1</sup> undertook an extensive research to find an antidote for cocaine poisoning. After several weeks of experimentation, he found that the toxic action of cocaine could be attenuated in animals by the administration of calcium salts. This he explained on the basis that, as the action of cocaine is enhanced by potassium, and as calcium is antagonistic to potassium, it must also be antagonistic to cocaine. For this reason, it would seem that the action of cocaine is dependent on the balance between the ions of calcium and potassium.

Mayer further found that cocaine and calcium seem to have a reciprocal inhibiting action in regard to lipoids, especially suspensions of lecithin. Further research brought out the fact that the action of cocaine depends on physico-chemical colloid processes, and not on merely chemical processes. The potassium ion is an antagonist of calcium, and the theoretic assumption, that an excess of potassium would enhance the toxicity of cocaine, was proved to be the actual fact in experiments on the frog heart.

### COCAINE POISONING

About the same time Fabry<sup>2</sup> reported a clinical application of calcium chloride in cocaine poisoning. In this instance, an injection of a 10-percent solution of calcium chloride was successful in neutralizing the toxic condition arising in a nurse of 19 years following the injection of 7 mgm. of morphine, 3 mgm. of atropine and the application as a spray of a 10-percent cocaine-epinephrin mixture to the laryngeal mucosa and the painting of the tonsils and the palatine arch with the same mixture, in connection with a tonsillectomy. The calcium chloride was given intravenously, at a very slow rate. After two minutes, during which 2 cc. of the solution had been injected, a marked change for the better set in. The convulsions ceased; the rapid, superficial breathing became slow and deep; and the rigid extremities relaxed. At the same time, the pulse grew stronger. A total of 7 cc. of the calcium chloride solution was injected in seven minutes. Convulsions returned

several times, but the intervals became longer and the convulsions milder, yielding readily to the administration of camphor.

Among others who have had satisfactory results with calcium in cocaine poisoning are Underhill and Gross, who believed that the beneficial effect of calcium is due to its action as a nervous depressant. Pic has obtained equally satisfactory results with calcium in several cases of strychnine poisoning.

In cases of poisoning with cocaine or strychnine, the calcium should be given intravenously and very slowly. The earlier investigators, like Mayer and Fabry, used calcium chloride, with rather unfortunate results in several cases, due to paravenous leakage, with subsequent necrosis. Lately, physicians have been turning to the use of calcium gluconate, which does not possess the irritative properties of the chloride. In cases of poisoning it is of paramount importance to get the calcium into the blood stream at the earliest possible moment, and calcium gluconate is the salt of choice.

### LEAD POISONING

More recently, calcium as an antidote has demonstrated its value in cases of lead poisoning. Aub, Fairhall, Minot and Reznikoff<sup>3</sup> have demonstrated that the metabolism of lead, so far as absorption, storage and elimination are concerned, is very closely related to that of calcium. The facts have been summarized by Hunter and Aub as follows:

"Various studies have also established that there is a selective localization of lead in the calcareous portion of the bones, where it is probably stored as the very insoluble tertiary lead phosphate. Under normal conditions it may remain inactive for long periods of time, but an alteration toward the acid side of the usual hydrogen-ion concentration of the organism may liberate this stored lead, probably by transforming the tertiary lead phosphate into the more soluble secondary lead phosphate. Thus various observations on both cats and man have shown that the production of an acidosis by the ingestion of either phosphoric acid or ammonium chloride definitely increased the excretion of lead.

This effect is accentuated where a diet deficient in calcium is given. The theory which has been suggested for this is that, because both lead and calcium are held in the body at a common site and as similar compounds, the same physiologic conditions would favor the liberation of both. Thus a very deficient intake of calcium, by causing liberation of reserve stores of calcium salts from the skeleton, also causes an increased liberation of lead. It was further observed that a high calcium diet quickly relieved the toxic episodes of lead poisoning and apparently reduced the excretion of lead."

These observations formed the basis of treating patients suffering from lead poisoning with calcium. According to Cantarow, the management of cases of lead poisoning with calcium may be described in two stages:

1.—In cases of acute lead poisoning, in which there are such toxic symptoms as intestinal colic, neuritis and encephalopathy, it is necessary to employ such measures which will cause a rapid removal of lead from the circulation and store it in the bones. This may be accomplished by giving the patient a diet rich in calcium, such as milk, green vegetables, eggs, etc., or by administering calcium salts, preferably the gluconate. For the severe manifestation, such as colic, quick relief is usually obtained by an intravenous injection of calcium gluconate. This should be supplemented by oral administration, on the average, of 300 grains (20 Gm.) of calcium in 24 hours.

2.—Even after all the acute symptoms have subsided, it is desirable to maintain a high calcium intake for several days, and the second stage of the treatment is started, which has for its object the rapid elimination of the lead stored in the bones. The most effective way of accomplishing this is to administer large doses of ammonium chloride and parathyroid hormone, which increase the excretion of both calcium and lead by mobilizing them from the bones, in which they have been stored during the first stage of the treatment. While this is being done, the patient must be kept on a low calcium intake. The ammonium chloride is given in doses of 30 grains (2 Gm.), four times daily; and from 40 to 80 units of the parathyroid hormone may be administered daily, in one or two doses. Frequent estimations of serum-calcium should be made when parathyroid hormone is used. Generally, ammonium chloride alone gives

satisfactory results and, when the patient cannot be kept under constant close observation in a hospital, the use of parathyroid hormone is not recommended.

Young, Taylor and Merritt<sup>4</sup> have studied the question of calcium in the treatment of cases of mercurialism. According to their studies, the behavior of mercury is not unlike that of lead, in certain respects. They suggest that the same principles utilized in the management of acute lead intoxication may be applied to the treatment of acute mercury poisoning. These principles may also prove to be useful when applied to the therapeutic use of mercury, favoring or inhibiting its storage in the body, as desired.

Another of the remedies used in the treatment of syphilis—arsphenamine—may be responsible, at times, for toxic reactions. Stokes<sup>5</sup>, who has had considerable experience with this type of poisoning, states that calcium can be utilized with good results here. It may be also used as a prophylactic treatment. Says Stokes: "The detoxifying and irritation-reducing effect of calcium can, I think, be utilized, and 10 cc. of calcium gluconate, intravenously or intramuscularly, just before the arsphenamine injection, has seemed to smooth the course in some otherwise exceedingly reactive patients."

Calcium metabolism is certainly one of the most fascinating studies, which today is assuming greater and greater importance in the comprehension of disease and intoxications of various sorts. As far as poisoning with certain alkaloidal and metallic drugs is concerned, calcium seems to be about the most satisfactory form of treatment at our disposal.

#### REFERENCES

- 1.—Mayer, K.: The Value of Calcium as an Antidote in Cocaine Poisoning. *Schweiz. med. Wchnschr.* 54: 835, Aug. 24, 1922.
- 2.—Fabry, F.: Calcium and Poisoning with Cocaine. *Munchen. med. Wchnschr.* 69: 969, June 30, 1922.
- 3.—Aub, J.C.; Fairhall, L.T.; Minot, A.S., and Rosnikoff, P.: Calcium Therapy in Lead Poisoning. *Medicine* 4: 1, April, 1925.
- 4.—Young, A.G., Taylor, F.H.L., and Merritt, H.H.: Uses of Calcium in Mercurial Poisoning. *Archiv. Dermat. and Syph.* 26: 539, May, 1930.
- 5.—Stokes, J.H.: Actual Problems in Today's Dermatology. *J.A.M.A.* 94: 1929-1935, April 5, 1930.  
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#### THE DOPE PROBLEM

The dope problem is the best advertised and least important of all our latter-day illusions. Less than one person out of every thousand in the United States is addicted to morphine in some form.

It appears that our legislators have undoubtedly overdone the thing, as shown by the results. That is what they usually do when they attempt to legislate about medical matters. And that is also about what happens when they attempt to legislate against vice by distorting it into crime.—DR. E. H. WILLIAMS, of Los Angeles, in *Med. Herald, Phys. Therap. & Endocrine Survey*, Sept., 1930.

# Utilization of the Posterior Wall of the Stomach in Valvulo-Tubular Gastrostomy in Case of Small and Contracted Stomach\*

By Julius L. Spivack, M.D., Chicago, Illinois

**I**N PERFORMING a gastrostomy, one of two difficulties is usually met with: Either the gastrostomy opening is not water-tight and the gastric contents leak, producing painful eczema, or the canal becomes obliterated and there is difficulty in feeding the patient.

Surgeons were usually dissatisfied with the results that have hitherto been obtained, and for this reason many methods have been devised.

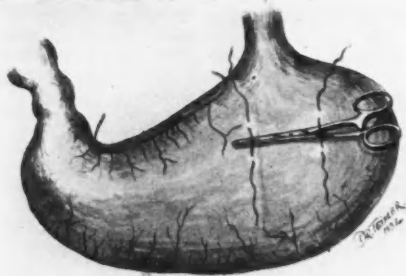


Fig. 1.—Sero-muscular stitches in place.

In 1900, Depage formed a tube of the anterior wall of the stomach. This tube was lined with mucous membrane, and therefore would not become obliterated. Thus one of the drawbacks was eliminated. However, the other drawback, leaking through the opening, is not overcome by this method and it is, therefore, not satisfactory.

In order to overcome this difficulty, I devised, a few years ago, a method in which a valve is formed at the base of the tube, which makes the stomach water-tight.

Since the original article was published, about forty (40) gastrostomies have been performed, by myself and other surgeons, by this method. The surgeons who operated by this method were well pleased with the results obtained.

I shall not here describe this method in detail, but those who are interested will find it in my original article<sup>1</sup> and also in articles by surgeons who are familiar with this method.<sup>2,3</sup>

The method gives excellent results, when the details of the execution of the operation are meticulously followed.

In case of a small and contracted stomach, the flap may be so small that it may be difficult to make a valve and a tube of sufficient length. This would be a very rare occasion, because, even with a very small stomach, it is possible

to make a valve and tube. Dr. R.W. McNealy<sup>4</sup> reported a case where he operated on an infant two days old, and had no difficulty in making a valve and a tube. However, there are cases

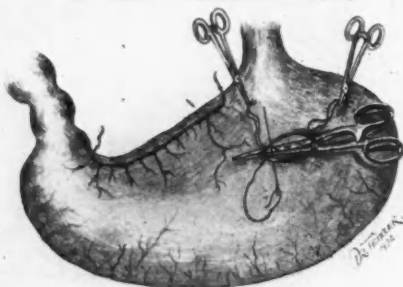


Fig. 2.—Suturing of two folds by a continuous sero-muscular suture.

where the stomach is so small that, after utilizing part of the wall to form a valve, there is not left enough of the anterior stomach wall to form a tube.

I was confronted with one such case, on March

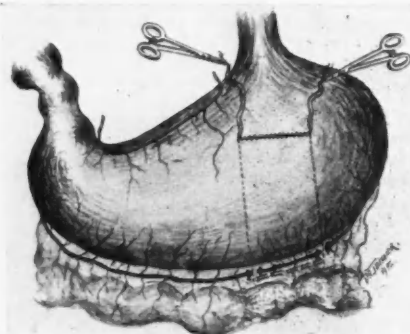


Fig. 3.—Gastro-epiploic arteries ligated. Division of gastro-colic ligament.

1, 1932, in a male patient, sixty years of age, admitted to the West Side Hospital, on the service of Drs. George Thompson and Frederick Hartmann, on February 29, 1932, suffering with carcinoma of the cardiac end of the stomach. As Drs. Thompson and Hartmann had decided that my method of gastrostomy should be performed, they very kindly invited me to operate with them on their patient.

\*Received for publication Dec. 28, 1932.

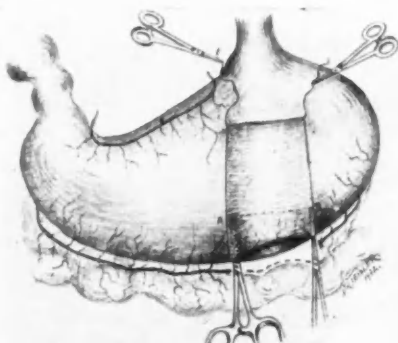


Fig. 4.—The artery forceps catches the posterior wall of the stomach at points A and B.

The operation was performed on March 1. After opening the abdomen, the stomach was found to be very small and contracted and, after the valve was made, there was left very little of the anterior stomach wall to be utilized for the formation of the tube. In order to over-

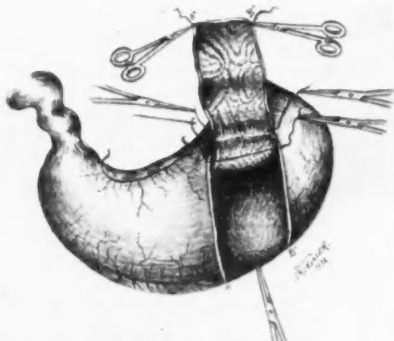


Fig. 5.—The flap is formed. The points A'' and B'' are the points A and B of the posterior wall of the stomach.

come the difficulty, I cut the gastro-colic ligament, ligated the right and left gastro-epiploic arteries at the angles of the flap, drew out the posterior wall of the stomach for a distance of one inch and formed a good-sized flap. A tube was then formed out of this flap, the stomach closed and the divided part of gastro-colic ligament sutured back to the stomach.

The accompanying pictures illustrate the procedure clearly. The tube was of sufficient size and was sutured to the anterior abdominal wall. We had no difficulty in feeding the patient and, during the first three weeks after the operation, he gained fifteen pounds. He lived nine months after the operation and died December 15, 1932.

During all this time, the feeding of the patient was not difficult.

#### BIBLIOGRAPHY

- 1.—Spivack, Julius L.: Eine Neue Methode der Gastrostomie (A New Method of Gastrostomy).

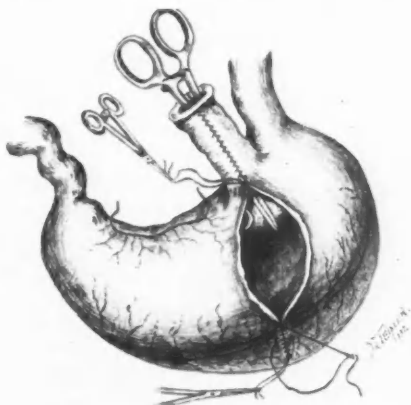


Fig. 6.—The tube is formed. Closure of the stomach is started.

Bruns' *Beiträge zur klinischen Chirurgie*, Bd. 147, August, 1929.

2.—Thorek, M.: "Surgical Errors and Safeguards." J.B. Lippincott Company, Philadelphia, 1932.

3.—Lowry, N. and Sorenson, S.: Spivack's Method of Gastrostomy. *Am. J. Surg.* 18: 521-28, Dec., 1932.

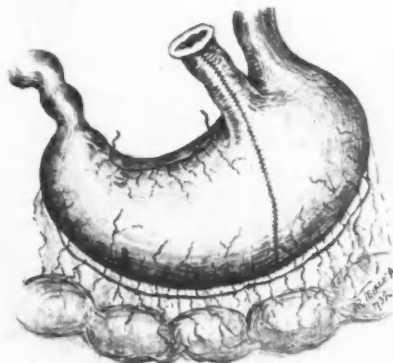


Fig. 7.—The tube and stomach are closed. Gastro-colic ligament sutured back to the stomach.

4.—McNealy, R.W.: Personal Experience with Spivack's Method of Gastrostomy. *Proceedings of the Chicago Surgical Society*, March, 1931.

30 N. Michigan Ave.

# PHYSICAL THERAPY AND RADIOLOGY

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## Hydrology

THE employment of water in therapeutics dates back to the dawn of medicine and has held and increasingly holds the approval of the most enlightened members of the medical profession. Long before the inclusive term, physical therapy, was recognized, hydrotherapy, or medical hydrology as it is more modernly baptized, was popularly and scientifically utilized, both in the hospital and in the home. Due, possibly, to intricate and expensive institutional development, simpler hydiatric procedures, conveniently available within the home, have become diminishingly appreciated by that erroneously educated section of the profession to which simplicity in therapeutic measures connotes inefficiency.

Although the four "elements," of which Shakespeare believed our bodies to consist, have been multiplied, water, one of these misconceived "elements", comprises 70 percent of the entire body weight, and to sustain its daily aqueous needs it is necessary to provide a respiratory and alimentary fluid intake of not less than four pints. Considering the enthusiastic vogue for "cosmetology", and its etiologic dependence upon unhealthful acts of omission, as well as commission, the hydrotherapist, apparently, is

more disposed to recognize the intimate relationship existing between health and beauty.

The chemical changes in the body can proceed only if and when sufficient fluid is imbibed; tardy elimination of effete material from the intestinal canal may be stimulated by judiciously administered colonic irrigations; various local and constitutional inflammatory reactions are safely alleviable by a simple but timely application of a respectively indicated compress, fomentation, inhalation, sponge bath, sitz bath, wet sheet pack or ice pack—to mention only a few of the innumerable hydiatric modifications always available, no matter how serious the emergency or simple the environment.

Water is readily transmutable into a solid, a liquid or a vapor; and each metamorphosis has its own therapeutic indications. This ubiquitously available, inexpensive and widely adaptable physical therapy agency can provide any desired degree of heat or cold; of stimulation or sedation. The therapeutic merits of water, externally and internally applied, should be restudied, and simplified hydrotherapeutic advice and practice more often and wisely recalled and instituted.

J.E.G.W.

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## GADGETS OR PEOPLE?

*We have valued machines too much and manhood too little. We have developed material resources and neglected spiritual things. We have improved gadgets and forgotten to improve people.*—ROBERT QUILLEN.

## Dental Radiography in Medical Diagnosis

By Harry J. Field, D.D.S., and Alfred A. Ackerman, A.B., B.Sc., D.D.S., Newark, N. J.

**T**HE aim of this paper is to present to the thoughtful physician an analysis of the development of dental radiography as a valuable adjunct to routine medical examinations.

The history of human progress is a slow, evolutionary procession of ideas, marked by an occasional outburst of enthusiasm accompanying a new idea, which it is believed will revolutionize the old order. These outbursts we label "fads." Unfortunately, a great number of these discoveries will not stand up under the searching scrutiny of scientific research or in the fire of day by day practicability. Consequently, with the passing of the early period of rash prophecies and glowing promises, we enter a quieter era, the ebb tide, when but a few shreds of the original idea remain as definite, worthwhile progress. These few shreds now become the starting point of new research, thus completing the cycle.

This developmental tendency is well marked in the field of medicine—slow plodding progress down the years, and suddenly a brilliant discovery which is to completely upset accepted theories of medicine. Perhaps the innate urge to abolish man's physical ills is responsible for the frequency of this wave-like type of progress in medicine.

Oral infection in its relation to general systemic disease, is just beginning to emerge from its "fad" era. About 20 years ago, William Hunter, of England, wrote a brilliant paper on the oral cavity and its structures, in their relation to systemic disease. He contended that disease processes in the mouth and jaws played a large part in the etiology and pathology of many diseases. In no uncertain terms he denounced the type of dentistry being done in America at that time. While many of Hunter's contentions were not new, they had never before been expressed so clearly and so convincingly.

We need hardly relate what a storm his paper aroused in American professional circles. Wave after wave of acclaim and denunciation swept the profession. American dentistry awakened from its lethargy, fully aroused. Intense research was instituted to prove or to disprove Hunter's beliefs. Before 10 years had elapsed, almost all the ills to which the human body is heir were being laid at the feet of oral foci of infection. The historic slaughter of the teeth was on in full blast! The wave was at its height!

Slowly but surely, the reaction set in. Even today, however, many physicians will glance into a patient's mouth and summarily order the removal of all gold restorations, whether good, bad or indifferent. If this paper does nothing but convince its readers that it is advisable to order radiographic studies of the teeth before ordering their removal, it will have well served its purpose.

The development and use of the dental radiograph was one of the most potent forces in combating ruthless extraction. To be sure, since 1910 an immense amount of investigation has

been completed by research men and clinicians in the relation of oral foci of infection to systemic disease. Their work has proved beyond a reasonable doubt the existence of such a relationship. Today, no well informed physician or dentist can overlook the possibility of apical infections, cysts of the jaws, residual areas of pathologic tissue, etc., acting as foci of metastatic lesions. None the less, we have learned not to condemn all teeth which are either crowned or which carry root fillings. Until such teeth have been radiographed and the existence of infection definitely proved, they should not be extracted. A few case histories will perhaps illustrate this point most lucidly.

### CASE REPORTS

**Case 1.**—Mr. Z, a male, age 45, past history negative, developed a severe arthritis, sufficiently



**Fig. 1.** (Left).—Arrow indicates retained apex. Multilocular cystic degeneration has occurred about the apex and has involved the first bicuspid.

**Fig. 2.**—Postoperative film immediately following surgery. Apex and cystic contents have been removed, along with the first bicuspid.

debilitating to force him to resort to a cane in locomotion. Local treatment, in the form of "baking," massage, heliotherapy, etc., were ineffective. Radiographic examination of the mouth revealed several non-vital teeth, with canals well filled and no apical disease present. In the lower left second bicuspid region a retained apex, with multilocular cystic degeneration, was discovered. The first bicuspid had become involved by the infection (Fig. 1). Surgical removal of the apex and the first bicuspid, along with complete enucleation of the cyst (Fig. 2), afforded prompt relief of the arthritis. With the aid of his physician, the patient was able to throw off the local infection in a short time. In this particular instance the removal of the non-vital teeth would have been useless. The true focus could be revealed only by the radiograph.

**Case 2.**—Mrs. B, a female, age 33, married, two children, complained of severe headaches for many years. Vocal disturbance caused her to consult an otolaryngologist, who discovered and removed a small growth in the larynx. The headaches were not relieved, and she was advised to consult a dentist. Radiographic examination of the mouth revealed a number of badly infected teeth and an upper third molar deeply embedded in the tuberosity, impinging on the neighboring structures (Fig. 3). Removal



Fig. 3.—Case of impacted upper third molar causing severe headaches. Removal of other diseased teeth, ineffective. Headaches disappeared immediately upon removal of impaction.

of all infected teeth did not clear up the headaches but, at a subsequent operation, the impacted third molar was removed. The immediate elimination of the headaches was gratifying.

**Case 3.**—This case is arresting, because of its dramatic development and its almost miraculous recovery. It is given only to portray an extreme instance of focal infection.

Mr. D., a middle-aged male, was first seen three years prior to his present illness, at which time he accompanied his wife to the office. A clear recollection is retained of a powerful, well-built, herculean man, in apparently splendid health. Three years later, this same man was literally carried into the office from a hospital bed, considerably debilitated, with sunken cheeks, shallow complexion and hollow eyes. It was some time before the patient was recognized as the robust Mr. D. His history was that of gradually failing health for the past year. Loss of weight, loss of appetite, lack of energy and a general listlessness were conspicuous.

He was ultimately hospitalized and his physician advised, as a primary measure, the clearing up of all oral infection. Radiographic examination revealed a badly diseased condition of the teeth and their surrounding structures. Because of the patient's extremely weak condition, it was deemed advisable to perform the necessary surgery in stages. Each section of the mouth was operated upon, at weekly intervals. Under the physician's care the case rapidly improved. Proper diet, tonics and rest were all that were needed to restore the patient to normal health within three months.

#### EXPERT STUDY REQUIRED

The science of dental radiology has advanced to such a point that the slightest deviation from the normal anatomy can be detected by the expert radiologist, well versed in the art of reading dental films. These qualifications must be stressed, because of the great number of "x-ray technicians," without professional background or training, who hold forth in x-ray laboratories.

From the early days of crude apparatus and

cruder technic, immense strides forward have been made. At the beginning, only gross bone lesions could be discerned. As apparatus and technic improved, new avenues of service were opened. Today, with a thorough knowledge of normal anatomic variations and with the aid of a carefully planned and executed technic, highly accurate interpretations can be rendered. In the words of Dr. Clarence Simpson, "Advanced interpretation implies a greater discrimination regarding the reliability of the evidence, keener perception of structural variations and better judgment of the significance of abnormalities. These, in combination with routine examinations and a skillful technic, will enhance the value of radiodontic service and eliminate many diagnostic perplexities."

A complete radiographic survey of the mouth requires a minimum of fourteen films. This type of service has been brought well within the economic realm of the patient of moderate means. Occasionally it may be necessary to take additional views. These should be taken when needed, particularly in the presence of extensive bone lesions, fractures, deeply impacted teeth, etc. From a technical point of view, the requirements for complete interpretation are thorough clinical examination, clear-cut definition, maximum detail and a knowledge of normal anatomic variations.

Radiology is playing an increasingly important part in the discovery of early evidences of disease. Incipient caries, thickening of the periodontal membrane and changes in the lamina dura, are seen only in the radiograph. Early bone changes accompanying pyorrhea, the type of pyorrhea present, the amount and extent of alveolar destruction, etc., are clearly demonstrable. No attempt will be made here to cover the entire field of dental radiology. Books can and have been written on this comparatively new science.

Suffice it to say that dental radiography is resorted to more and more by hospitals, clinics and private physicians to reveal obscure oral infections. It has played a historic part in demonstrating the need for closer cooperation between physician and dentist. Dentists have become more conscious of the broader concepts of disease. They recognize the need for medical examination and medical advice on many of their cases. The physician, too, has a greater awareness of the rôle of dental disease in many organic conditions. It is often amazing to a physician who has had little experience with oral disease to discover the vast amount of infection harbored in the mouths of patients of all classes. As a single instance of this point, it is difficult for many to believe the statistics of the Mayo Clinic. In radiographing completely edentulous mouths, Eusterman reported that 30 percent of such mouths are found to contain dental disease in the form of retained roots, areas of residual pathologic tissue, impacted teeth, etc. Whether or not a direct connection can be demonstrated between oral infection and systemic disease in any given case, it is obviously important information in a well-rounded diagnosis.

To sum up, chronic oral lesions frequently metastasize to set up low-grade infections in distant parts of the body. Such metastatic

infection cannot be eliminated until the discovery and removal of the primary focus. By far the most efficient means of revealing such

foci of disease about the teeth and jaws is the dental radiograph.  
130 Market Street

## NOTES AND ABSTRACTS

### Radium in the Brain

**I**N a paper read before the Clinical Congress of the American College of Surgeons, at St. Louis, Oct. 18, 1932, Dr. Max Cutler, of Chicago, stated that experiments made upon animals, by the implantation of needles containing radium element, for periods of from 24 hours to 21 days, have shown that this procedure can be carried out without injuring the normal brain cells. These results indicate that it should be possible to treat brain tumors in human beings, which cannot be entirely removed surgically, by this method, without harm to the patient.

G. B. L.

This preliminary report is made with the hope of stimulating further observation of this therapeutic agency in purely surgical conditions.

## NEWS NOTES



Dr. J. W. Marden, Assistant Director of Research, Westinghouse Lamp Company, making a laboratory test on the arm of a subject with a Westinghouse Type G-5 ultraviolet lamp.

### Sunlight in Surgery

**I**N *Surg. Gynec. & Obstet.*, Sept., 1932, Drs. F. P. Corrigan and W. Boukalik, of Cleveland, call attention to the great value of strong natural sunlight in the prevention of infection and treatment of wounds. In their experience, no other method of antiseptic treatment has been anything like as effective and satisfactory as the simple and inexpensive use of natural sunlight.

Where real, strong sunlight cannot be obtained, the use of lamps can be substituted for it. Recently a special lamp which approximates natural sunlight (including the ultraviolet component) very closely has been installed in the wards of St. Alexis Hospital, Cleveland, and has been used, especially in plastic surgery cases, as a prophylactic against infection. The procedure is especially valuable in keeping sterile certain skin areas, such as the perineum, which are greatly exposed to infection.

The method of using the sunlamp is very simple. Exposure of the wound area is started with the lamp bulb at a distance of about 30 inches for 5 minutes. This is repeated in 8 hours. Each succeeding day the time has been increased 1 or 2 minutes, depending upon the degree of pigmentation present in the skin. The distance is also gradually decreased, but never to less than 20 inches. The usual reaction has been a mild erythema, followed by a light tanning after three or four days' exposure.

The authors have had only two unfavorable results from the use of the lamp.

### Ultraviolet Bulb Lamp

A new kind of glass used for the bulbs of ultraviolet lamps makes it possible to produce sunburn (erythema) in twenty minutes. On a clear mid-June day, at which time of the year the ultraviolet rays of the sun are the strongest, the person of average susceptibility may receive a sunburn in about 20 minutes. In laboratory tests, this has been duplicated with the new lamp, held at a distance of 20 inches.

Termed "soft" glass by industrial men, because it melts at a much lower temperature than the so-called "hard" glass, it transmits 50 percent more of the ultraviolet energy generated by the lamp.

One important advantage is that the "soft" glass, being easier to work, will make it possible, ultimately, to produce the lamps at a lower manufacturing cost.

# STOMATOLOGY

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OFFICIAL ORGAN OF THE AMERICAN SOCIETY OF  
STOMATOLOGISTS

ASSOCIATE EDITOR: ALFRED J. ASCIS, Sc.B., M.A., D.D.S.

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## Diseases of the Mouth, Face and Jaws

ON November 17, 1932, we attended a meeting of the Second District Dental Society of the State of New York, where the entire surgical program was prepared and presented by the Dental Division of the Brooklyn Naval Hospital. The papers dealt with various phases of diseases of the mouth, face and jaws, showing the splendid work done by that department in the realm of scientific dentistry or stomatology. Medical societies interested in dentistry—and dental societies, for that matter—might be proud of the excellence of such papers and the interesting manner in which they were presented.

A pleasant surprise came to us in the address of welcome by Captain Butler, where he paid tribute to the splendid achievements of American dentistry in his statement that, "if we define a physician as one legally authorized to treat diseases, then a dental surgeon is as much of a physician as the eye-man, the urologist or the psychiatrist". Dr. Butler has honored the dental profession by placing dentistry above the "craft" or "trade" and recognizing our efforts as those of a true stomatologic specialty in medicine.

All this is indicative of the trend of the times.

This exemplary effort for recognition, coming as it did without our knowledge and outside of our group, shows dentistry's need of going with the progressive tendencies. Dentistry must be held together, especially in these days of outside attempts to exploit the medical professions under the pretext of serving the public better. Dentistry must go forward and upward as a unit to its destiny, irrespective by what route the fates decree. The use of "dentistry", "oral health service" and "stomatology" as synonyms to indicate the scope in practice, scientific content and professional individuality of dentistry will help to keep our profession from breaking into parts.

We have indicated on previous occasions that our efforts are directed away from professional politics, controversy and strife. Our Society is a strictly scientific group and our aim is to help solve some practical clinical problems met with in daily dental practice. We believe that in this direction lies the maintenance of our independence of any forces from without. We attach little importance to forms or labels and pin our faith to recognition, won by hard and persistent labor in preventing and controlling diseases of the mouth, face and jaws.

A.J.A.

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## REPUTATION

*Be critical of your personal habits of living. Few men are more subject (than physicians) to the ebb and flow of public opinion. The conversation that takes place on all sides of you—concerning you—has a great effect on your ultimate success or failure. Being talked of is part of the process of getting known. Don't trifle with that process! You cannot afford to neglect the social side of your medical work—if you desire to grow in your professional life.—FASSETT EDWARDS, M.D., in Medical Economics, Dec., 1932.*

# Medicine, Stomatology and Dentistry

by Paul R. Stillman, D.D.S., F.A.C.D., F.A.A.P., New York City

Clinical Professor of Periodontia, New York University College of Dentistry, etc.

TO SOME of the other weaknesses of the statutes relating to present-day dentistry might be added the inability of the State to separate, successfully and actually, the living human organism into the segments which have been allotted to medicine and dentistry by the laws enacted. Dentistry has been allotted a legal right to the small domain of the human body called the mouth, in which are the teeth, from which dentistry derives its name.

The fields of medicine and dentistry have been segregated by law, but the human body, notwithstanding the laws of the state, remains a biologic entity and its functions and needs are subject only to the laws of nature. Despite such an evident truth, in the composite mind of the profession of dentistry there still exists a consciousness of an actual separation between dentistry and medicine.

For many years the highest interests of the moment, in dentistry, lay apart from the interests of medical men, even as it does, to a lesser extent, today. During this period, the art of dentistry was developing. The development of an art always precedes the development of the science upon which the art is based. Dentistry is now demanding that the scientific side be developed in dentistry, to meet the demands of its far-developed art.

Science is based on knowledge. The sciences which dentists were obliged to study at the colleges, which developed the individual into a dentist, were almost entirely medical sciences, pertaining particularly to the extra-oral field. Dentistry possesses but two basic sciences of its own—dental anatomy and dental pathology.

There has always been, in dentistry, a demand for more knowledge upon which to build its sciences; but the knowledges of the medical profession gave meager comfort and could not provide the solutions and answers to the problems of dentistry, so dentistry began to develop a consciousness about its own need for biologic knowledge, pertaining particularly to the mouth. This enlarged and broadened dental field the medical profession comprehends as its recognized branch of stomatology; viz., "That branch of medicine which treats of the mouth and its diseases."

In that period of scientific vacuity, dentistry began to realize that it was existing in its darkest intellectual age. Only the mind of Green Vardeman Black seemed to realize dentistry's actual needs, and set about developing the fundamental sciences of dentistry, based upon his own knowledge. He had hopes that dentistry could be delivered out of its sciolistic age and could at last emerge into a profession, when it had its roots growing on a soil of actual basic science. He began with that subject which is most needed for the foundation and growth of his profession, realizing that the science of

anatomy, as taught in medicine, had failed to provide a knowledge of the teeth adequate for the needs of dentistry. In answer to this crying need, Black set to work to provide a comprehensive dental anatomy for dentists. How well he succeeded is shown by the fact that later study and research by others added but little to the science of Black's "Dental Anatomy."

With this completed, Black plunged into the work of preparing his volume on special dental pathology. This was a monumental work and laid the foundation for much of the scientific knowledge of this subject which our special field possesses today, despite the fact that some of Black's ideas have been proved wrong by later scientific research. Those who have followed have been able to add much to dental pathology and research, and this science is still being avidly pursued. But despite the work upon the subject, both that which preceded Black's efforts and that which followed, the fact remains that his "Special Dental Pathology" was the first developed book on the science, and a full-fledged rival has not as yet been published.

Black sought knowledge and realized that his beloved profession could not become an actuality as such until it possessed written sciences of its own. He visualized Gray's anatomy as a work which provided a primary point of departure for an understanding of the biologic sciences of medicine, which could not be comprehended until the knowledge of anatomy was mastered. Gray was to medicine what Blackstone was to the law; and Black is to dentistry what these two are to each of these other professions.

Black always, in his unselfish devotion, pursued the phase of study which, in his opinion, would fulfill the greatest cultural need of his contemporary dental colleagues. Had he, however, been able to foresee the consequences of his proceeding from anatomy to the development of dental pathology, instead of following the more logical sequence, from anatomy to physiology, the story of dentistry and that absurdity, "dental hygiene", which dentists dignify by calling it a science, would be far different than it is seen to be today.

Dentistry's greatest present need is the development of its sciences. Although its new designation as stomatology, acceptable and more correct as it clearly is, should not be construed to be the ultimate objective. To make the name significant and really important, knowledge is essential to provide a background, in order to give content to the name. Dentistry is changing daily and it will one day actually be stomatology, whether it is called by that name or not. A name never made an object, an individual or a science, great. It is only a symbol. Science in possession, representing knowledge, compels the recognition of the world.

The orderly progression of dental or stomatologic science proceeds from anatomy to physiology, to hygiene, and then to pathology. The development of pathology in dentistry, magnificent as it is, without the possession of a foreknowledge of the physiology of the teeth and their associated structures, has led some dental pathologists into a fog of misinterpretation of their own research work. These absurdities can be traced directly to a lack of fundamental knowledge of the function of the dental organs. Many valuable investigations in pathologic research have been marred by etiologic misinterpretation. This is especially true of dental caries.

This same observation is true of the so-called science of dental hygiene; and to it might be added the indictment of those who have trained "dental hygienists"—the exclusively feminine group within dentistry. While the pursuit of

knowledge in pathology was sincere and industrious, research in the science of dental hygiene has been slovenly and lacking in intelligence. Dentistry has permitted the science of hygiene to develop with an almost incredulous indifference to its existence.

The objective of all dentistry and of all dentists is the health of the human being who becomes their charge. Health cannot be comprehended by means of a diligent study of disease. It is true that a knowledge of disease is a cultural necessity for a comprehension of oral health. Health, however, has its own science, devoted wholly to an understanding of normal conditions. The name of this science is hygiene, which, like physiology, from which it proceeds, has as yet no written science devoted to an understanding of health within the dental and oral field.

551 Fifth Avenue

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## NOTES AND ABSTRACTS

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### Prenatal Care in Relation to Dentistry

THE average pregnant woman who has a diet rich in calcium and phosphorus, who gets a proper amount of exercise in the sunshine, does not need calcium as a drug, viosterol nor ultra-violet rays; if the obstetrician or the dentist detects hypocalcemia, then one or all of them should be used.—DR. E. BISHOP, of Brooklyn, N. Y., in *Dent. Cosmos*, Jan., 1932.

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### Treatment of Vincent's Angina

BREAK a tube of neosalvarsan (nearsphenamine); take a small piece of cotton and wrap it around the end of a probe; moisten it in glycerine and dip it into the nearsphenamine powder so that the powder adheres all over it, and apply this into every corner of the ulcer. The nearsphenamine tube can be stoppered with a piece of sterile cotton, and one or at most two tubes of the powder should suffice for a case. For a very obstinate case it may be necessary to give an intravenous injection of nearsphenamine, in addition to the local treatment.—DR. R. S. STEVENSON, in *Practitioner* (Lond.), Jan., 1932.

### Stomatology in the Navy

THE change which is taking place in the status of dentistry is shown by the fact that a recent order in the U. S. Naval Hospital at Brooklyn, N. Y. (a general hospital of more than 1,000 beds, recognized by the College of Surgeons), changing the designation of its "Dental Service" to *Stomatologic Service*.

This change was brought about by the efforts of Commander C. H. Mack, D.C., U. S. N., Chief of the Stomatologic Service, and the order was signed by the commanding officer of the Hospital, Capt. C. S. Butler, M.C., U.S.N.

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## NEWS NOTES

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THE tenth anniversary meeting of the American Society of Stomatologists will be held at the Hotel McAlpin, New York City, April 27 and 28, 1933. An excellent program of papers, discussions and clinics has been prepared. All physicians and dentists will be welcome. Write for particulars to Dr. Alfred J. Asgis, Secty., 310 W. 72nd St., New York City.

# A LIVING FOR THE DOCTOR

## A Challenge To The Medical Profession

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WE OF the medical profession have before us the report of the Committee on the Costs of Medical Care, consisting of the reports of a series of studies made by the Committee and collaborating agencies and a final report, entitled "Medical Care for the American People" (University of Chicago Press, November 1932), in which there is a somewhat prejudiced abstract of these studies, the recommendations of the Committee, two minority reports and separate personal statements by two members of the committee.

In the current medical literature of the past few weeks there have appeared many comments, editorial and otherwise, on the recommendations and on the first minority report. In most of these the first minority report, which was signed by eight physicians and the president of the Catholic Hospital Association, who is also Dean of the School of Medicine of St. Louis University, has received very favorable comment, and the physicians who are reported to have signed the majority report have been severely criticized. I say "physicians who are reported to have signed the majority report" advisedly, because one of them has informed me that he signed neither the majority nor the minority report, as he believed that the Committee should, in its final report, present the facts disclosed in the aforementioned studies and should not attempt to make any recommendations. He apparently would subscribe to what President Hoover is reported to have stated in a recent message to Congress: "The background of our American system is that we should allow free play of social . . . forces," and to what our distinguished fellow physician, Oliver Wendell Holmes, observed in 1859: "... The system under which the young republican American is born trusts the whole unimpeded tide of life to the great elemental influences, as the vast rivers of the continent settle their own level in the obedience to the laws that govern the planet and the spheres that surround it." One can not but wonder whether all who did not sign a minority report or individual statement were arbitrarily credited with signing the majority report.

It is quite evident that, if the Committee had refrained from making recommendations, there would have been no minority reports. The

recommendations of the Committee seem to have been formulated by a group representing the social sciences, who have for years been promoting low and graduated-fee pay clinics, middle-rate hospitals, health insurance, state and federal aid in the furnishing and coordinating of medical service, preventive, diagnostic and therapeutic. The first minority report, signed by eight physicians and a layman who is dean of a medical school, is equally typical of the group now in control (more or less) of organized medicine in the United States, who seem to fear that, if they make any really constructive suggestions regarding the furnishing of medical service—suggestions that might in any way affect the individualism of the practitioner of medicine—they might lose that control of the destinies of medicine they now exercise. And this despite the fact that, whether we admit it or not, in urban and metropolitan areas at least, we are all practicing group medicine. Few are in organized groups, but all of us are practicing as groups of individuals who almost invariably refer patients to certain specialists or to certain consultants, who usually are members of the staff of the hospital to which we regularly take our patients or who have offices near ours.

The second minority report, which is signed by two doctors of dental surgery, takes a position midway between that of the majority and first minority, but really adds nothing. In this connection an anomalous situation should have attention directed to it. About one hundred years ago, because they were refused chairs of dental surgery in a medical school, two physicians started a dental school. For many years the doctors of dental surgery repaired and extracted teeth, but gave no consideration to the fact that teeth were, after all, a specialized tissue, just as much a portion of the *homo sapiens* as the eye or the kidney or the skin. It was relatively recently that the work of Frank Billings and Thomas L. Gilmer brought out the fact that diseased teeth might cause disease in other parts of the body, a fact known to Benjamin Rush in 1809, before the first dental school was organized.

The connection between diet or disease in other organs and dental caries or other dental pathology is just beginning to be generally appreciated. Should not all dental schools be

abolished? Should not the care of the teeth, preventive, diagnostic and therapeutic, belong to the medical profession, just as much as the care of any other organ of the body? If the interrelationship between dental pathology and general pathology is to be thoroughly understood, the problem will be solved only by those who have been educated as doctors of medicine and have, through added experience and training, become specialists on the teeth. We look to the ophthalmologists to solve the problems of eye pathology, not to the opticians. Will not the problems of dental pathology, in the future as in the past, be solved by the doctors of medicine who have specialized in dental surgery, rather than by the doctors of dental surgery? Has not the time arrived to undo the work of two disgruntled doctors of medicine, who founded the dental profession when, because of their lack of vision, the officers of a medical school refused to recognize the specialty of dental surgery?

Portions of the statement by Walter H. Hamilton, Ph.D., Professor of Law, Yale University Law School, a member of the Committee, are deserving of much more attention than they have received. Professor Hamilton wholeheartedly endorses compulsory health insurance and lay-controlled health centers. One can not but wonder whether he would be equally enthusiastic in support of compulsory legal insurance, to the putting of all those admitted to the bar and practicing their profession in the position of public prosecutors or public defenders, or to dispensing all legal services from a legal center, the county court house or local federal building. Or should each of these legal centers be organized as corporations, with boards of trustees, which legally are to have formal authority, composed of laymen (men with no legal education or experience), no one of whom has any pecuniary interest in the venture?

In the portion of the final report entitled "The Present Status of Medical Care" it states (Figure 2. Our Medical Dollar, page 15) that 29.8 cents goes to physicians in private practice, 12.2 cents to dentists, 23.4 cents to hospitals, 18.2 cents for medicines (less than one third of these purchased at the order of a physician), 3.3 cents for public health work, 5.5 cents for nurses, 3.4 for cultists and 4.2 cents for all others. Just 42 percent of the cost of medical service is controlled at all by the medical and dental professions. The services of the members of the medical profession, at least, who receive 29.8 cents out of every dollar spent for medical care, is available all of the time to all of those who are ill, ambulatory cases, and those confined to home or hospital, at rates from nothing up, with the "up" not so high as it should be, considering the ability of the patient to pay (page 191). Over the remaining 58 percent of the costs of medical care the physician and dentist have no control. The hospitals are, for the most part, controlled by government agencies, by philanthropic business men, who serve as trustees of not-for-profit hospitals, by fraternal or religious organizations. Perhaps, if the medical profession were more responsible for their planning and operations, hospitals would be able to operate more economically and would provide adequate facilities for those of all income groups.

It does not promote economical management when the superintendent and the members of the medical staff are aware of the fact that the trustees will, except in times like the present, manage somehow to make up any deficit.

The policy almost universally adopted by these lay trustees, of using pupil nurses to lower the cost of nursing service in the hospitals, has resulted in so flooding the country with graduate nurses that, even in the most prosperous times, with a rate of pay of \$7 to \$8 a day, nurses are unable to earn much over \$100 a month. If there were fewer graduate nurses it would be possible for them to work more days at a lower rate, so being available for a larger proportion of the population, and yet make more money than they did even in 1928-29.

The costs of medicines, even of the one third prescribed by the physicians, are regulated by the laymen—the manufacturing chemist, the wholesaler, the retailer. The same is true of all equipment, whether used as diagnostic or as therapeutic aids or in the practice of preventive medicine. The prices charged for much such apparatus for use in the diagnosis and treatment of human conditions is often all out of line with the price of the same equipment when it is to be used for other purposes. For example, there is available, for the furnishing of ultraviolet radiation in barns and hen houses, a lamp that sells for about \$7.50 retail. The same lamp, when mounted for use in the home, the hospital or physicians' office retails for about \$50.00. It is possible, we are informed, to make, in a university laboratory, an x-ray tube at less cost than it can be purchased from the corporation that manufactures most of the x-ray tubes in use in this country.

In the report, little is said about the low income of the average physician and dentist. This question and several others associated with the rendering of medical service are discussed more clearly, sanely and dispassionately in Chapter I of the "Final Report of the Commission on Medical Education." (The Office of the Director of Study, 630 West 168th Street, New York, 1932.)

#### THE CHALLENGE

The reports, final and preliminary, of the Committee on the Costs of Medical Care, its recommendations, majority and minority, and the individual statements of its members that have been published and the Final Report of the Commission on Medical Education seem to constitute a challenge to the medical profession. They report various deficiencies in the supplying of medical services and an inequitable distribution of the costs, but they neglect to emphasize the fact that the physician, with his graded fees of from nothing up, is responsible for less than a third of the total costs of illness, though his services are, with very few exceptions, available for all of those who are ill; that the big items—costs of hospitalization and nursing service, of drugs and equipment, etc.—are now controlled by laymen. They recommend that physicians' and dentists' services should also come under the control of laymen, that they may be rendered more efficiently and economically. Might it not be better for the physicians to undertake to

attempt to manage these portions of medical service which constitute much the greatest drain on the sick who are in moderate circumstances? The physician knows which of these services are necessary and which are luxuries. Should he not undertake, in an organized way, the better marketing of his own services and the regulation of the number of physicians, so that the present overproduction may cease?

Will the medical profession accept the challenge? Will it continue to insist that what has been is the best and always will be the best, whether or not it really is, until the 120 million odd possible patients in these United States rise up and say that the medical profession has failed to furnish medical service such as they deserve and need, and that they, holding the medical profession responsible for all of the costs, will run the show themselves, with the aid of the state and of compulsory insurance? If this were done, the individual physician might be better off financially, and the patient might receive more medical service at a lower rate. But what of the quality of the service rendered and of the type of man rendering it; what of the advances in medical science under such conditions?

If we are to have socialization of medicine, compulsory health insurance and lay control of medical service, should it not be a recognized part of a plan to socialize all government and industry? As part of such a plan, one would have less cause to object.

Why should the laymen who have so conducted their affairs that we continue to have periods of great inflation, followed by periods of at least equally great depression and who have been unable to prevent unemployment, technical or otherwise, be able so to manage medical centers employing physicians, that the medical services would be rendered more economically, ably and equably than are other public services? They have been unable to furnish the portion of medical care for which they are and have been responsible as equably and at a cost in proportion to the ability of the patient to pay as has the physician whom they have handicapped by the high costs of office space, laboratory and hospital services and pharmaceuticals. They have failed in their part of the undertaking and so wish to take over the only groups in the medical field over whom they now have little or no control, the doctors of medicine and of dental surgery.

#### A SUGGESTED SOLUTION

Shall the practice of medicine survive as a profession, or shall it become a trade? Shall organized medicine accept the challenge of the Committee on the Costs of Medical Care?

If organized medicine is to accept this challenge, it should start by amending its constitution to include in the statement of its objects, in addition to the promotion of the art and science of medicine and the betterment of public health, the furnishing of medical service in all of its aspects to all of the people of these United States all of the time. It should also amend its constitution and by-laws and those of its constituent or component societies to enable them to own and/or operate not-for-profit hospitals, clinics, medical centers, corporations for the

manufacture and distribution of medical equipment and supplies including medicines, medical schools, schools of nursing, pharmacy, etc. They should be encouraged to contract with governmental bodies to furnish medical care to the indigent and at very nominal fees to the lower income groups.

There is no question that there would be a great saving of time to the doctor and of overhead, both in rent and in equipment, if the doctor's office were located in his hospital. This however does not mean that the hospital should employ the doctor. The minute that the doctor becomes an employee—an impersonal individual—the corporation employing him intervenes between him and the patient. The doctor may, however, employ the hospital to furnish him office space, secretarial service, laboratory service, pharmaceutical service, 24-hour telephone service, collection service, auditing and bookkeeping and filing, etc. Furthermore, it would be easy for the group so employing a hospital to mutually agree as to the sliding scale of fees to be charged for hospital visits, diagnostic or ordinary office consultations or for the services of specialists and consultants, in such a way that the cost to the patient would be materially lowered. The group officing in and patronizing the hospital should, through their duly elected officers, direct the operation of the hospital and clinic on a not-for-profit basis, even if they did not own the property. Such a group would function as well as, if not better than, they would if employed by the hospital. Each would have his own patients, but would have immediately available all of the personnel and equipment needed to furnish them the best of medical service. The personal relationship of doctor and patient would be served and there would be at hand all of the advantages of practice by a group of employees, with none of the disadvantages.

In rural districts there might be only one such medical center to a county. In some instances there might be only one for two or more adjoining counties. In that case, some members of the staff would live at a distance from the center and use it chiefly for diagnostic or consulting work and for in-patients, and would continue to conduct their ordinary office and family practice from their homes. One such center would probably suffice in most smaller cities, where it might also supply the needs of the county as a whole. In larger cities there would be as many centers as there were hospitals, the size of each group depending to a certain extent on the size of the hospital. In metropolitan areas and in the larger cities and counties, in which there were more than one center, the county medical society would supervise these centers as the state society supervised all of those in the state and the national society the centers in the various states. This does not mean that all must be alike, any more than it means that under the present organization all members of the American Medical Association must do all things in the same way. It would mean that there would be available to all the results of various experiments being tried in all parts of the country. The national association should manage the industries furnishing equipment and medicines and other supplies, leaving

the state and county units free to study the best methods of making available to all of the people the best of medical service, at a cost commensurate with their ability to pay and on terms that would cause the least amount of hardship to all.

This may be just as utopian and impractical as many other plans that have been suggested, but it is a method "which can rightly be fitted into our present institutions and agencies, without interfering with the fundamentals of medical practice." (Recommendation 6, First Minority Report, p. 176.) Furthermore, it places on Organized Medicine the whole of the responsibility for the furnishing of medical service. The profession is supposed, by most people, to have that responsibility at present but, in reality, has but little authority, even over its own membership, and practically no authority over any who do not belong to the American Medical Association or its constituent and component societies. The dental profession is in the same position. Between them they contribute but 42 percent of the costs of illness, though they care for a very large portion of the sick, whether ambulatory or confined in their homes, in hospitals or sanatoriums. About six percent of the costs of illness goes to pay for drugs prescribed by physicians, and about twelve percent for drugs prescribed by laymen, by advertising or by regis-

tered pharmacists. Twenty-three and four-tenths percent (23.4%) of the costs of illness are due to hospitalization, and yet only a very small percentage of those ill are hospitalized and, at present, members of the medical profession have little, if anything, to say about the planning or operating of hospitals.

The medical profession is blamed for the high cost of laboratory service that is due largely to expensive equipment, supplied by concerns controlled by laymen, and to reduplication made necessary by the distance between hospital and office. Another fact not generally understood is that the overhead of the practicing physician amounts to almost 40 percent of his gross income. That is, only about 18 cents out of every dollar spent for medical services now go to pay the salary of the Doctor of Medicine, plus interest on the money invested in his education—that is on his capital investment, plus profits.

Whatever the scheme adopted may be, the medical profession should accept the challenge of the Committee on the Costs of Medical Care and undertake to prove that it can render all medical service efficiently, economically and ably, at a cost commensurate with the ability of the patient to pay and by methods that will cause a minimum of hardship and privation.

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## NOTES AND ABSTRACTS

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### Corporations Practicing Medicine\*

**T**HE physicians who have considered seriously the acceptance of full-time salaried positions with corporations of business men who propose to exploit such service for profit, may consider well what happens when economic stress, personal relationships, differences of opinion as to scientific methods, or similar complications necessitate separation of the employed from the employer.

The employer of the physician in private practice is his patient. In times of stress these patients may not be able to pay him as much as previously, perhaps not at all. During the present emergency most physicians are continuing to care for their patients and are waiting patiently for the period when a return of prosperity will permit the settling of debts. These physicians still have their practices.

The physician employed by a corporation has no practice of his own. The patients are not his patients—they are the patients of the clinic, institute, group or

other corporation that employed him. When he severs his connections with his employer, for any of the reasons that have been mentioned, he must remove most frequently to another community, there to begin as he might have begun years before, to develop the relationships with individual patients that have been the very basis of medical practice since the beginning of time.

And what of the patient? In the clinic, institute or group lies the record of his medical care, but such a record is far removed from the human understanding that is fundamental between patient and physician. Michael Davis cites, as one of the qualities which patients may rightly expect in medical service, "a sense of personal responsibility for each patient on the part of the physician and a sense of individual attention from the physician on the part of each patient." Is there the slightest reason to believe that any corporation of business men, vending medical service through salaried physicians, will ever be able to meet this expectation?

\*Extract from Editorial in *J.A.M.A.*, Oct. 8, 1932.

# THE SEMINAR

[NOTE: Our readers are cordially invited to submit fully worked up problems to the Seminar and to take part in the discussion of any or all problems submitted.]

Discussions should reach this office not later than the 1st of the month following the appearance of the problem.

Address all communications intended for this department to The Seminar, care CLINICAL MEDICINE AND SURGERY, North Chicago, Ill.]

## PROBLEM NO. 2 (MEDICAL)

Submitted by Dr. Hugh D. Stites, Aledo, Ill.

(See CLIN. MED. & SURG., Feb., 1933, p.108)

**Recapitulation:** A primipara of 33 years delivered, spontaneously, an eight-pound, male infant, after a ten-hour labor. The baby seemed entirely normal for five days, and then developed a brief fever of 102° F., without other symptoms. The next day his temperature went to 104.5° F. and subsided in an hour, but he was cyanotic, dyspneic and showed muscular contractions and bulging of the anterior fontanelle. Spinal puncture released 7 cc. of markedly yellow fluid, but no blood. He died soon after.

At autopsy, the anterior three-fourths of the brain were edematous and dark-red, with a line of demarcation from the posterior quarter, which appeared to be normal.

**Requirements:** Discuss the nature and cause of the conditions, and suggest treatment and prophylaxis.

DISCUSSION BY DR. J. R. SMITH,  
WARSAW, MISSOURI

This problem is interesting for several reasons. In the autopsy, the line of demarcation is the first and conclusive proof of why the infant died. Dr. Stites states that labor was ten hours in duration. This delivery was probably an occipito-posterior presentation, as it entered and passed down through the pelvic cavity. This being the case, the frontal and parietal bones were crushed down into the anterior portion of the cerebrum, to the extent and time needed to exsanguinate this portion of the brain and, as it were, obliterate any future circulation, as was shown in the autopsy. This produced sapremia or septicemia, which produced the fever and later the cyanotic condition and death. The compression occurred as the head passed under the symphysis pubis.

As to what should be done to relieve or prevent this condition, my only suggestion would be to shorten the time of delivery. This patient probably had a narrow pelvic cavity, antero-posteriorly, which, of itself, would prolong labor, unless overcome by assistance with pituitrin and forceps. Three to five hours is sufficient time for any case of delivery. My work runs from 40 to 60 cases every year, and I am never detained longer than two to

four hours, nor do I injure the mother or baby by this assistance.

DISCUSSION BY DR. EMIL C. JUNGER,  
SOLDIER, IOWA

A primipara at 35 years of age is pretty well set, as far as pelvic flexibility is concerned, and an eight-hour labor is a long time for a baby's brain to endure congestion.

The new thymo-pituitrin preparation is supposed to cause much easier dilatation, thus shortening the first stage. Forceps would shorten the second stage and should be used more generally. That is prevention. The mother should eat less and better balanced foods and exercise (work) more.

Nothing can be done for these babies' brain congestion. Another pregnancy, with a smaller baby and better maternal conditions and with quicker delivery, will probably give the mother a living baby.

CLOSING DISCUSSION BY DR. GEORGE B. LAKE,  
CHICAGO

The explanation of the cause of this baby's death, offered by Drs. Smith and Junger, is probably correct. No evidence, however, is presented suggesting the probability of a complicating infection, and it seems likely that the fever was due to damage inflicted upon the heat-regulating center in the brain.

If this woman is to have another baby, she should be given a thorough and careful pelvimetric examination, including roentgenograms, in order to determine exactly how much space her pelvic outlet affords. If this seems sufficient to permit a normal birth of a full-term infant, well and good. If not, she should enter upon her second pregnancy with the understanding that labor is to be induced at the seventh month or that a cesarean section is to be done at term. Intelligent antepartum care, including diet, may do something to regulate the size of the fetus.

If the pelvis is of such a size or shape that normal birth is impossible, and if cesarean section is refused, this woman should be sterilized.

I am inclined to doubt the safety and advisability of using pituitary extract with the hope of expediting labor where pelvic abnormalities are present, and also of using forceps promiscuously, merely to hasten a labor which is progressing somewhat slowly but otherwise

normally. Those who declare that our high maternal mortality and morbidity rates are due to "meddlesome midwifery," seem to me to have a good deal of reason on their side.

#### PROBLEM NO. 4 (SURGICAL)

PRESENTED BY DR. E. O. HOUDA,  
TACOMA, WASH.

Mrs. St. G., age 37, married 22 years, the mother of a 21-year-old daughter, presented herself complaining with bladder pains, frequent micturition and an almost continuous watery vaginal discharge, having a fecal odor at times. The vaginal discharge is more profuse while lying down. Frequent changes of large pads are necessary. Menstrual flows are irregular and, at times, severe enough to cause an alarming loss of blood. There is no pain associated with the menses, although there is some increased tenderness in the left side of pelvis.

All of these complaints are associated with a mass that fills the floor of the pelvis and protrudes from the vagina, appearing like a large cystocele. The past history notes a mild attack of smallpox twelve years ago; pleurisy eight years ago; and surgical correction of prolapsed uterus six years ago, at which time the appendix was removed. Present complaints began about

four years ago, the watery discharge appearing a year ago. While under a "guaranteed cure" by an electric specialist, a fecal complication of undetermined nature made its appearance, about six months ago.

Blood examination shows a negative Wassermann reaction; hemoglobin, 60 percent; red cells, 3,000,000; 6,300 leukocytes; the differential count shows nothing worthy of note.

On physical examination she is obviously anemic; heart and lungs are normal; she is poorly nourished; the abdomen is flat and not tender, except over the brim of the left pelvis, where a mass is palpable. The vulva is moist with a watery discharge. The urethral opening is displaced far to the right, upward and out of view. The finger cannot readily pass beside the vaginal tumor, which apparently has an origin beyond the left vaginal wall. However, this tumor can be pushed upward a little, when a sudden gush of fluid escapes. This fluid has a sickening-sweet odor and contains small white flakes, not unlike those observed in liquor amnii. Urea test of this fluid is negative. The bladder is catheterized with difficulty, because the urethra is displaced by the tumor. The urine is free of pathologic evidences.

**Requirements:** What is the probable nature of the tumor, the origin of profuse watery discharge, and what is the mode of surgical attack?

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### DOCTORS AND THE SOUL

*The principal grievance which I have against the doctors is that they neglect the real problem, which is to seize the unity of the individual who claims their care. Their methods of investigation are much too elementary; a doctor who does not read you to the bottom is ignorant of essentials.*

*To me the ideal doctor would be the man endowed with profound knowledge of life and of the soul, intuitively divining any suffering or disorder of whatever kind, and restoring peace by his mere presence. Such a doctor is possible, but the greater number of them lack the higher and inner life, they know nothing of the transcendent laboratories of nature; they seem to be superficial, profane, strangers to divine things, destitute of intuition and sympathy. The model doctor should be at once a genius, a saint, a man of God.—Journal Intime of Henri-Frederic Amiel, Scheveningen, Aug. 22, 1873.*

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### EMPIRICISM AND COMMON SENSE

*It is sometimes assumed that empiricism and common sense are synonymous. This is by no means always true. The empiric physician is all too frequently most gullible as to the acceptance of fantastic theories; most unthinking or even dangerous in his therapy. A good deal depends on what kind of a mind and how much of a mind the physician, whether scientific or practical, had to begin with.—DR. JAS. B. HERRICK, of Chicago, in J.A.M.A.; Nov. 29, 1930.*

# CLINICAL NOTES AND ABSTRACTS

## Diagnosis of Syphilis

A PATIENT with syphilophobia is an abominable nuisance, but a physician with syphilophobia is an apostle of intellectual vacuity.

This past year a young man was admitted to a sanatorium with a tentative diagnosis of suspected tuberculosis. During the course of his examination it was discovered that he had a positive Wassermann reaction. There were no physical signs of the disease and the history of the patient was negative as regards primary sore and secondary signs. Nevertheless he was subjected to intensive antisyphilitic medication and also malarial infestation.

On his return to business, as manager of a large company, the company physician informed his employers that the man was a menace to the health of the rest of the employees, on account of having a positive Wassermann reaction, and he was dismissed from their service.

In a recent letter to a medical journal, a physician states that a patient of his awoke one morning with diplopia, that a Wassermann test was made and found to be positive, and that he had diagnosed the case as one of neurosyphilis. There was no history of syphilitic infection and no signs of the disease, beyond the presence of the diplopia. Now there are other conditions which produce diplopia, such as encephalitis lethargica, influenza with meningeal involvement and paralysis of the ocular muscles, but in this case the physician immediately instituted antisyphilitic treatment and continued to do so to the following extent: seven intravenous injections of neoarsphenamine; six intramuscular injections of bismocymol; mixed treatment for three months; five injections of neoarsphenamine; six of arsphenamine; five of bismocymol; eleven of neoarsphenamine; ten of iodobismol; mercurial inunctions for six

weeks; and, after a little rest, he is going to give eleven more of neoarsphenamine and ten more iodobismol—and the Wassermann reaction is still positive!

Stokes asserts that "the blood Wassermann test is not a guide to infectiousness or noninfectiousness. It may be negative with infectious lesions present, and positive in noninfectious cases." Incidentally, one might remark that syphilis was being diagnosed successfully many years before the Wassermann reaction was discovered.

R. S. MACARTHUR, M.D., C.M.,  
Los Angeles, Cal.

[It is difficult to find genteel words to express one's disgust at the lazy, sloppy practitioners of medicine who permit a laboratory to make a diagnosis for them (such diagnoses being as often erroneous as accurate), and saddle a patient who has been so hapless as to fall into their unworthy hands with an **unverified** diagnosis of a disease like syphilis, which, in the present state of public ignorance, involves a lifelong social stigma.

One fears that malpractice (the word is not too strong!) of this type is one of the reasons for the deplorable loss of respect for and confidence in the medical profession, which has been observable of late.  
—ED.]

## The Treatment of Pellagra\*

THE specific treatment of pellagra, by administering vitamin B<sub>2</sub> (G, P<sub>1</sub>, P<sub>2</sub>) is sufficient to occupy an entire discussion and will not be dealt with here. There are, however, other constitutional factors which may render the vitamin treatment ineffective.

\*Abstract (by G. B. L.) of a lecture before the A.M.A. at Philadelphia, June 11, 1931.

Fifteen percent of these patients show deficient serum proteins in their blood, and they may even die with symptoms of protein starvation. There may also be a deficiency of the antineuritic vitamin ( $B_1$ ) and of fixed basic salts in the blood. We must see that pellagra patients are furnished abundant proteins in their diet and that other deficiencies are corrected.

Many of the symptoms in pellagra are due to disturbances of the gastrointestinal tract, which must be corrected by diet and medication, in order to break the vicious circle that develops. The diet should, in such cases, be liquid and non-irritating, including plenty of milk, sodium chloride and water. Kaolin is sometimes very helpful. Chronic diarrhea may be the result of a secondary bacterial infection, which must be dealt with according to the indications.

For the dermatitis which is so prominent a symptom of pellagra, nothing is better than the local use of Butesin Picrate Ointment, one percent.

ROY H. TURNER, M.D.,  
New Orleans, La.

### The Physical Examination as an Instrument of Research

**I**N research investigations, the determination of the physical fitness or condition of a group of persons has proved a difficult problem. No simple solution is to be expected. It is necessary to piece together information from whatever source it can be obtained, with an eye to the precise nature of the investigation itself. All possible means of measuring physical condition must be brought into play—mortality, sickness and the general physical examination.

Advancement of scientific knowledge rests to a large extent on the improvement of technic. In no field is this more needed than in that of the physical examination. Today, although technic acquired with much difficulty is employed in making it, no two doctors really follow the same procedure. It must be made clear that the demands of analysis of data collectively are different from the absolutely necessary demands of clinical medicine. The physician, looking for definitely pathologic conditions, will probably not fail to note any really serious and practically determinable condition. However, if the results are to be used for statistical purposes, differences in standards of judgment become extremely important, because the minor de-

grees of impairment are so much in the majority.

Thus the standardization of the physical examination is fundamental in research work. The following principles are suggested:

1.—No impairment can be regarded as susceptible of quantitative analysis unless we can be sure that the condition has been looked for in each individual and checked as present or absent.

2.—Most impairments encountered in examinations are matters of degree, varying from slight deviations from the normal to very serious conditions. These degrees should be indicated.

3.—It is necessary that these degrees mean more or less the same thing to the different examiners. Special intensive training of the examiners is required.

4.—Special stress should be placed on the quantitative aspects of the examination, because these can be most effectively analyzed.

5.—The examination should be "blind" in so far as practicable—i. e., the examiner should not know whether the individual is or is not exposed to a given hazard under investigation, or the degree of his exposure.

6.—A thorough history is necessary, because the examination itself gives only a cross-section survey.

7.—The presence of acute conditions at the time of the examination must be allowed for.

8.—A minimum time should be set for each examination.—U. S. Public Health Service, Washington, D. C.

### A Medical View of Birth Control\*

**E**VERYONE is aware of the progress medical science has made in the past half-century, especially in the prevention of disease. Many diseases, such as typhoid, have almost been eradicated. However, man still dies of smallpox—not to the same degree as when this disease decimated whole countries—but he does die and he shouldn't. The means of prevention are at hand and readily accessible to all mankind. Diphtheria carries off its victims year after year when, as a matter of fact, but few should perish. All of these conditions, and many more, are readily preventable. We seem, however, to be careless concerning

\*Adapted from *Birth Control Review*, Dec., 1932.

the prevention of disease. We are too much the creatures of custom and superstition to accept a change in our habits, even at the cost of life itself. This applies especially to things medical, where old time tradition plays an important rôle.

A great many babies are born, some alive and some dead, which should never have seen the light of day. Many mothers die during pregnancy and childbirth who should never have been allowed to become pregnant. The means of prevention, simple and effective, are at hand, but are not used often enough.

When birth control is advocated, laymen and physicians often think that it is wholly a social or economic measure. But aside from such considerations it has important medical aspects.

There are many conditions where it may be advisable that conception should not occur. In a considerable number of cases of pregnancy presenting abnormalities, it is customary to do abortions. This operation, however, is fraught with much danger, as its mortality and morbidity rate may be very high. Furthermore, abortion necessitates the killing of an embryo, whereas birth control prevents having one to kill.

Every woman, especially one contemplating marriage, should have a periodical physical examination, because of the possibility of fertilization. In such cases a careful examination may reveal much of importance. In many women, inequalities in the pelvic dimensions (pelvic deformities) are found. All obstetricians recognize the dangers of such anatomic anomalies. These deformities arise from bone diseases (rickets), constitutional conditions, or traumas. Here the prevention of conception by the commonly advised methods finds a ready application. It is a prophylactic measure which should be adopted, unless the individual is willing to accept a cesarian section or other operative procedure in order to have a baby.

During pregnancy and labor, the heart and kidneys have extra work to perform. A normal heart and many abnormal ones—when adequate physiologic compensation has been established—can weather the storm very well. But in the case of a woman with a diseased or weakened heart or kidneys or both (for the conditions are often associated) the strain upon these organs may be entirely too great and cause much damage. In such cases, after examina-

tion by a physician, there can be no question of the efficacy of prevention. The risk run by a woman with heart or kidney disease is too hazardous to allow her to become pregnant.

It is a well-accepted fact, based on large experience, that pregnancy should not occur or continue in a tuberculous woman. In fact, early abortion is advised in such cases. However, this operation often, of itself, has a deleterious effect upon the patient. It is far better that conception be prevented. There is no doubt that birth control is of the greatest value in the case of a tuberculous woman.

Diabetes is another disease in women of childbearing age that is badly influenced by pregnancy and labor. This is especially so in younger women. Control of conception should be exercised in diabetes.

Syphilis and gonorrhea present many problems during pregnancy. The physician is conscious of the danger of infection of the child. When gonorrhea is present in a woman, he realizes the danger of secondary infection of the pelvic organs, such as the fallopian tubes and ovaries, and much can be done to improve conditions if pregnancy does occur; but until recovery from these diseases has taken place there should be no pregnancy. It is a simple matter to prevent conception until these venereal diseases have been eradicated by thorough treatment.

Birth control can be profitably used in cases where there has been a difficult previous labor, with disastrous results to mother or child or both, in order to prevent a recurrence. In such cases it might be wise to consider sterilization. The same may be true in forms of feeble-mindedness. The experience in California and Michigan, where sterilization is legalized and sanctioned under certain conditions, demonstrates the value of the positive prevention of pregnancy by this method. However, although the operation is not considered dangerous and the mortality rate from it is small, it finds many objectors.

Hereditary deafness, albinism and retinitis pigmentosa occur in a significant percentage of people. Sterilization is sometimes advocated in such cases. But birth control is as effective and much simpler, if it can be successfully applied.

These are some of the instances where birth control is of great value; there are many others. There has been much criticism

of the high infant and maternal mortality rate in the United States. Certainly the death rate is entirely too high and something should be done about it. The proper selection of those who should have children, when, and under what conditions of health or disease, together with good prenatal care, can do much to lessen the toll paid by the women who bear our children.

SAMUEL ROTHENBERG, M.D.,  
Cincinnati, Ohio.

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CLINICAL MEDICINE AND SURGERY has become a necessity. I regard your magazine as more important to the profession than any other agency in the Doctor's life — clear, broad and concise: a real help in times of depression.  
—M.S.R., M.D., Kansas.

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### The Doctor and Play\*

**H**EART disease has rapidly increased until it leads tuberculosis and cancer. But that is not the worst of it for the doctor, for doctors are leading all others in the death rate. The doctors are dying prematurely. The doctor's life is just too hard. He eats irregularly and imprudently; and sleeps when he can, and the frequently repeated shocks and the burdens that he carries are too great. He is subject to numerous infections and little by little it all affects his heart and that great organ becomes crippled and cannot last a good lifetime.

The doctor should play a good part of his time; play joyfully, enthusiastically from young manhood on until he gets old enough to play golf. He should learn to play golf, to master the points, to swing the clubs with pleasure and drive the ball with accuracy from constant practice. The hazards, like the obstacles in life surmounted, add strength. He should enjoy the companionship of fine men in the game. What could be more healthful than exercise in the open, breathing the oxygen, enjoying the healing rays of the sun. If you play, play more. Play until you forget everything else.

Play tennis. It is interesting, exciting, wholesome exercise. The moving picture in the slow motion reveals the grace and beauty of the game. It is an inspiring and

perspiring life in the great outdoors, and fine for pleasure and health.

Go to the ball game; become a fan; root with the best of them and learn to love it and cuss the misses; that is the misses in the game, not the girls.

Follow football and like it if you can. Perhaps there is no other game where the contest is such good sport, requiring such cool judgment and quick thought, unless it is poker, and that is too confining, among other things.

Ride horse back; ride a good horse, a spirited fellow, until you become part of the horse, riding like a Centaur. Ride with the wind; speed with the wind; ride against the wind and feel the boost and thrill of it. Nothing in all exercise so completely brings every muscle of the body into action. That is the life, even if like the Prince of Wales, you tumble to the ground occasionally!

Go to the races and follow the speeding horse. It is splendid and will make any man forget his work and his troubles if he has a speck of sport in him. "The horse, who hath clothed his neck with thunder"! Of all animals, the horse is most interesting, next to man himself.

If you haven't a good horse, ride a hobby. Nothing better than the camera. Be a fiend in the field of photography, discovering the beauties of nature and of the animal, and the human creature; putting upon the mat the likeness of everything beautiful.

Perhaps your hobby may be collecting —collecting anything from butterflies to rare cacti; or it may be rare old books. Shut yourself in occasionally and read and rest.

Go to the humorous movie. In this serious day every man needs a good laugh to expel from his system all the gloom and the toxins and poisons of hardship, physical and mental.

Go boating. What is more beautiful or sweeter than a boat on a quiet lake or stream in the moonlight, with a companion, when the mocking birds are singing and all nature is at peace. Take a long voyage on the glorious ocean.

Court your wife for a change and watch the results. Whether sweetly emotional, dramatic or tragical, it will be entertaining.

Hunt what you like most to hunt, whether it be the bobwhite, which is now

\*Reprinted editorial from *Med. Rec. and Annals*, June, 1932.

calling its mate over the hollow, the squirrel away up in the tree, the fleet-footed deer or the hugging bear. In some ways the hug of a bear is more diverting than to have a man or woman hug you. Not only is the quail calling, but the buck is running, and the turkeys are gobbling at night while the whippoorwill is singing its love song. Love your dog next to your family, but be careful that it is not more than your wife.

Spread yourself and spend a nickle for peanuts; go to the circus, by heck, and crawl under the tent if you can, like you did when you were a boy. It will be lots of fun.

By all means go fishing, the greatest of all sports. The trout is playing in the stream, fighting the falling water with skill and joy and is ready for the hook and the play of the reel. The red bird is singing in the bottom, a gentle breeze is blowing, the lazy clouds are floating here and there. The stream is quiet, peaceful; a turtle sits on a log over there where the moccasin is playing in the water; a "snake-doctor" flits around and darts down to the surface of the water occasionally. Everything portends well. The fish are going to bite!

Shucks, throw the old bag and knives in the corner; shut the door and let's go fishing. Doctors are dying too early.

J. S. LANKFORD, M.D.,

San Antonio, Tex.

### Curing the Doctor's Bill

**E**MINENTLY sensible—so sensible that one wonders why it was not thought of and put into effect long, long ago—is the plan whereby doctors will collect their fees in installments, via a central agency. About a thousand dentists, physicians and surgeons in New York have become members of such an organization, the Mutual Professional Plan, Inc., to which we wish success. It is a two-way plan, offering relief to both parties involved on the following basis: The patient, before sitting in the dentist's chair or lying on the operating table, agrees upon the amount of the fee, signs a note and pays it off in monthly installments geared to his income, plus interest of 6 percent, to the central agency, which in turn advances immediately to the physician one-half the total amount of the fee.

Such a plan would cure—at any rate, alleviate—the peculiar and usually highly irregular financial relations of patient and physician. Doctors do not like to be demanding, as theirs is a vital service which should always be given, when really necessary, regardless of reward. And the public is incredibly lax and mean where doctor's bills are concerned, putting them at the bottom of the monthly pile, delaying them, a good part of the time never paying them at all. It always seems harder to pay for repairs than for acquisitions, and patients—unless they are visibly the richer by a handsome set of gold teeth—dislike parting with money for a state of health which they feel should be theirs by natural right.

It is to be hoped that the plan will succeed as it deserves and be extended until the most important service one man can perform for another is on a basis at least as secure and accepted as the ownership of a vacuum cleaner or an electric icebox.—Editorial in the *New York Herald-Tribune*.

[We wish to call attention to the fact that arrangements similar to that of the Mutual Professional Plan, Inc., are not unique. Medical and dental finance corporations and acceptance companies are operating in various parts of the country (see CLIN. MED. AND SURG., for October, 1930, page 738), and the only reason why they are not even more successful than they are is because the physicians, especially, are so bogged down in their moss-grown traditions regarding their professional relations with their patients that they are unwilling to cooperate with the very people who are offering them the best hope of extrication from the financial difficulties of which they complain so bitterly.]

We suggest that our readers get in touch with the nearest professional finance company, find out what it is able and eager to do for them, and then help them do it.—Ed.]

### The Allergic History\*

**I**N studying cases of possible allergic disease, it is necessary to take a history of a special type, such as that here suggested.

\*Abstract (by G. B. L.) of a clinical lecture at the Oscar Johnson Institute, Washington University, Oct. 17, 1932.

The chief allergic complaint, as it affects the patient, should first be recorded, with the age at which it appeared and its subsequent course.

As there is a hereditary factor in seventy percent of these cases, it is important to know whether or not there is a family history of: Asthma, hay-fever, vasomotor rhinitis, urticaria, angioneurotic edema, eczema, migraine or gastrointestinal upsets.

All these conditions should be inquired about in the past personal history of the patient, also, and, in addition, headaches, colic in infancy, purpura and intolerance to certain foods and drugs.

In studying the history of the present illness, it is well to remember that allergic symptoms may follow such acute infections as influenza and pansinusitis, as well as any condition which may lower the general vitality. The time of year when symptoms occur is also a factor. It is well to know what specific treatment (if any) the patient has been given. Allergic symptoms in young boys tend to improve at the time of puberty; in girls they tend to become worse.

We should inquire as to the history of symptoms following contact with such inhaled substances as those connected with pillows, mattresses, blankets, rugs, toilet powders (orris root, chiefly), insecticides (pyrethrum), dogs, cats, horses, cattle, rabbits and fowls.

In regard to foods producing symptoms, we should ask about wheat, eggs, milk, cotton-seed lard substitutes and any others to which he may believe himself to be sensitive; also *how much* of each or all of these he eats daily. In order to obtain this information accurately, the patient should keep a diary, in which is recorded the kind and amount of all foods eaten each day, and a report of any unpleasant symptoms he may experience.

Practically all allergic patients are sensitive to several things, some of which may be inhaled and others ingested as foods. It is important to know the *total daily dose* of all known or suspected allergens, of all types.

A carefully-taken history of this type will greatly facilitate the diagnosis of allergic states and assist in their intelligent treatment.

F. K. HANSEL, M.D.,

St. Louis, Mo.

## Postoperative Diet

**T**HOSE who do abdominal surgery and, especially, stomach surgery, may be interested to add a new product to the possibilities of postoperative diet; namely, Gerber's strained cereal. This preparation has two especial recommendations:

1.—Its consistency: being thoroughly strained, containing no mechanical irritants, and the fact that it has been long-cooked make it easily digested and assimilated.

2.—The combination of the food material used makes it a balanced nourishment until more food can be added to the diet, since it contains vitamins A, B, E, and G.

I had the privilege of using this product even before it was placed on the general market. My patients have found it palatable, especially so when it could be seasoned to the taste of the individual. It can be served cold, while in a semi-solid consistency, or it can be heated, which makes it more liquid. I have used this cereal as a first feeding in cases such as resection of stomach for carcinoma of the pylorus; resection of ulcer of the lesser curvature; gastrojejunostomy; gastroenterostomy; ruptured appendixes, and acute appendicitis. In all of these cases it was well tolerated, causing no gas nor distress.

This product is accepted by the Foods Committee of the American Medical Association. The composition is whole wheat, hulled oats, whole milk, and additional wheat germ, making a total of twelve percent wheat germ. The mixture is cooked for forty-five minutes at 145 degrees C.; then thoroughly strained, being forced from an autoclave by steam pressure through openings .033 of an inch in diameter; and then prepared for canning.

CONSTANTINE L. A. ODÉN, M.D., F.A.C.S.  
Muskegon, Mich.

## Spinal Anesthesia\*

**E**XPERIMENTAL investigation in the Department of Surgical Research, Temple University, has furnished the following results:

1.—The fall in blood pressure following the injection of an anesthetic into the subarachnoid space is not due to a collection of blood in the splanchnic area.

2.—When the anesthetic ascends to the fourth thoracic nerve roots or higher, in the dog, there is an associated dilatation of the heart.

3.—The marked fall in blood pressure is mainly cardiac. Paralysis of the intercostal and phrenic nerves interferes with normal chest expansion and diaphragmatic excursion, causing a damming back of venous blood in the right heart and its tributaries. When the ascent of the anesthetic in the spinal canal is gradual, the blood pressure drops gradually and reaches its minimum in from 15 to 20 minutes. When the anesthetic ascends rapidly and sufficiently high to affect, not only the nerves of respiration, but the respiratory and vasomotor centers,

\*Surg., Gynec. & Obstet., June, 1932.

the fall in arterial pressure is almost immediate, but may be preceded by an asphyxial rise.

Sudden deaths following intraspinal injections may be cardiac, cardiac and respiratory, or respiratory.

Adrenalin (epinephrin) and ephedrine have not prevented cardiac dilatation in our experiments.

The Drinker respirator alone will resuscitate an animal that has received the full adult dose of a spinal anesthetic into the cisterna.

Up to the present time there is no known method of absolutely preventing deaths from spinal anesthesia, but artificial respiration offers the best means for combating respiratory embarrassment and the fall in arterial pressure.

DR. J. O. BOWER AND ASSOCIATES.  
Philadelphia, Pa.

### Insulin in Obliterative Lesions of the Blood Vessels\*

IN recommending the use of insulin in obliterative lesions of the blood vessels, I base it on two facts and a theory. The facts are that fat occurs in the intima of arterioles in sclerotic conditions and that insulin burns some fat in the "flame of carbohydrate combustion." The theory is that insulin, given to a patient with any malady in which the terminal vessels are becoming occluded, in addition to digesting carbohydrates, stimulating nutrition and dilating certain arterioles, may furnish relief by the burning of fat-laden cells in the flame which consumes blood sugar, thus allowing the blood stream to flow where it was stagnant or arrested.

I have 7 cases of various types of obliterative vascular lesions which have been greatly relieved by this mode of treatment. I begin with a dosage of 5 units of insulin, given usually about once a week. No dose exceeds 8 units, and about 10 treatments, as a rule, suffice.

S. M. BEALE, M.D.

Sandwich, Mass.

### The Convulsive Type of Reaction

IN *Tri-State M. J.*, May, 1932, Dr. R. C. Young, of Shreveport, La., reports 3 cases coming to hospital with the diagnosis of epilepsy which, on detailed study, proved not to be true epilepsy but convulsive reactions to other conditions. In these cases, besides a very thorough investigation of the history for cerebral trauma, birth injuries, etc., particular attention should be paid to spinal fluid examinations, and encephalography should be done in all types of convulsive phenomena of a chronic nature.

Of the 3 cases mentioned, the first was epileptoid convulsions due to endocrine disturbances, focal infection, etc.; the second was one of

brain atrophy; and the third was brain absorption, as a result of birth injury. The encephalograms confirmed these diagnoses.

### Postoperative Routine for the Surgical Diabetic\*

THE usual method of handling the surgical diabetic is to provide him with separate medical and surgical care, a method which has obvious disadvantages. A method of treatment which has been followed with excellent results in the Surgical Service of St. Luke's Hospital, New York, is drawn up by the internist, but carried out under the direction of the surgical staff.

The postoperative orders differ from the usual orders in only two respects; that the urine is examined at regular intervals; and that a special diet is instituted. The urine is examined, at three-hour intervals, for sugar, acetone and diacetic acid, even if the patient has to be catheterized to secure the specimen. Five (5) cubic centimeters of Benedict's solution are boiled for five minutes, preferably in a water bath, with 8 drops of urine, and the resulting specimen is checked against the table given below, insulin being administered according to the findings.

| Color of Urine | Percent Sugar in Urine | Units Insulin       |
|----------------|------------------------|---------------------|
| Blue .....     | 0                      | Orange Juice, 6 oz. |
| Green .....    | Less than 1            | 5 units             |
| Orange .....   | 1 to 5                 | 10 units            |
| Red .....      | 5 to 10                | 15 units            |

The colors are taken from the colors obtained by boiling 1, 5 and 10 percent dextrose solutions with 5 cc. of the Benedict reagent, and the order, naturally, is similar to the order in the spectrum. This color test, simple as it is, is perfectly accurate, for the colors have been checked and are within the range of the corresponding sugar percentages.

Until the patient is able to eat a semi-soft diet, which is usually at the evening meal on the first day, nourishment must be given in the form of sugar, best administered orally as orange juice. If nausea is a feature, 6 oz. of a 10 percent dextrose solution can be given rectally, and if oral and rectal feedings are both impossible, intravenous dextrose therapy can be resorted to. As a rule, however, the oral administration of orange juice is possible and by the evening meal on the first day the patient can be given a special test diet.

J. T. WITHERSPOON, M.D.

New Orleans, La.

\**Am. J. Surg.*, Sept., 1932.

\**Am. J. Surg.*, Sept., 1932.

# THE LEISURE HOUR

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## Pride That Brought a Fall

There is a popular story often resurrected by the acquaintances of Harvey S. Firestone, Henry Ford, and the late Thomas A. Edison.

Like many other prominent men, Mr. Firestone, had at his club a certain table which he preferred to all others, and waxed wroth when some inconsequent person chanced to usurp his prerogative.

One day Mr. Firestone had as his guests his two personal friends, Mr. Ford and Mr. Edison. He entered the club with his friends in tow. Behold! Three men sat at his table. Walking up to them, he said very magnificently:

"Gentlemen, it may please you to know whose seats you have taken. I am Harvey S. Firestone. My friends here are Mr. Henry Ford and Mr. Thomas A. Edison."

The men at the table rose to their feet simultaneously. "We are much pleased and highly honored to meet you, gentlemen," said one of them with a gracious sweep of his hand, "and in return, it may gratify you to know that this gentleman on my right is Mussolini, this one on my left is the Emperor of Japan, and I am Queen Victoria."—*Hospital Hints*.

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Teacher: "What do you know about nitrates?"

Willie: "Well — er — er — they're lots cheaper than day rates."—*Phoenix Flame*.

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## Specialist and Practitioner

A Specialist is a doctor who knows a great deal about a very little, and who goes along knowing more and more about less and less, until finally he knows practically everything about nothing.

A General Practitioner, on the other hand, is a doctor who knows a very little about a great deal, and keeps knowing less and less about more and more, until finally he knows practically nothing about everything.—R. de R. B.

## The Importance of Technic

One day the apprentice of an old botanic physician or root doctor was sent to the woods to get some bark of a certain tree. "Tom," said the doctor, as he departed. "I want you to scrape this bark downward. It is a cathartic. Don't scrape it upward, or it will be an emetic. And whatever you do, Thomas, don't scrape it both ways. If you do, nobody on earth can tell how it will act."—*Exchange*.

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## A Question of Etiquette

A boy and his mother stood looking at a dentist's showcase.

"If I had to have false teeth, mother, I'd take that pair," said the small boy, pointing.

"Hush, James," interposed the mother quickly, shaking his arm, "Haven't I told you its bad manners to pick your teeth in public?"

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## Why Worry

THERE are only two reasons for worry: either you are successful or you are not successful. If you are successful there is nothing to worry about. If you are not successful, there are only two things to worry about: your health is either good, or you are sick. If your health is good there is nothing to worry about. If you are sick there are only two things to worry about: you are either going to get well, or you are going to die. If you are going to die there are only two things to worry about: you are going to heaven, or you are not going to heaven. If you are going to heaven there is nothing to worry about. If you are going to the other place, just worrying won't keep you from it. So WHY WORRY?—*Hospital Hints*.

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The reason everybody feels free to discuss the great economic problem is because the listener doesn't know anything about it either.—*Fountain Inn Tribune*.

# DIAGNOSTIC POINTERS

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## Differential Diagnosis of Acute Conjunctivitis

In acute catarrhal conjunctivitis, the involvement is usually bilateral and the injection is as pronounced at the periphery and in the palpebral conjunctiva as it is in the bulbar conjunctiva. There is no pain or disturbance of vision. On examination, no pathologic change is noted in the cornea, anterior chamber, iris or pupil.

In acute iritis, there is the presence of pain; limitation of the injection to the region around the limbus; discoloration of the iris; and the small pupil, which is irregular and does not react to light.

In acute congestive glaucoma, there is the presence of pain and the subjective symptom of colored rings around lights; increase of intraocular tension, which is diagnostic; cloudy cornea; shallow anterior chamber; and the dilated, oval and light-fixed pupil.—DR. RUDOLPH M. CUTINO, in *Med. Times*, July, 1931.

## Sacro-Iliac Strain

In strapping a patient for sacro-iliac strain, always include the shoulders, for the whole body is involved in bending and affects the sacro-iliac joints.—DR. ARTHUR STEINDLER, Iowa City, Ia.

## Benign Gastric Tumors

By far the commonest site of benign tumors of the gastrointestinal tract is the stomach. Clinically the diagnosis of benign gastric tumor is most difficult, usually impossible. Roentgenologically, it gives a typical picture and the diagnosis can be definitely established in a high percentage of cases. The roentgenologic characteristics are: situation on the walls, rather than on the gastric curvatures; the tumors protrude into the lumen and produce a clearly defined filling defect; this luminal protrusion causes a sudden separation of the barium column; the walls of the stomach surrounding the tumor show a normal flexibility and the tumor interferes with peristalsis only in its immediate area; very rarely does

it give a palpable mass, and when a mass is felt the tumor has probably undergone malignant changes.—DR. E. M. McPEAK, of Washington, D. C., in *Southern M. and S.*, Mar., 1932.

## Mental Reactions Associated with the Menopause

As a result of observations over a prolonged period of time of a group of patients with emotional disturbances at the menopause, it appears that we may conclude; first, that too ready acceptance of tradition and superstition make it easy to accept invalidism as a necessary concomitant of the menopause; second, that while the involution is a period of life in which biologic failure is to be expected, a more competent emotional adaptation may be made, not on a basis of renunciation of satisfactions in life, but as a result of a readjustment of the balancing factor essential for a healthy mental state at the menopause.—DR. ELEANORA B. SAUNDERS, of Towson, Md., in *Southern M. and S.*, Mar., 1932.

## Appendix Incarcerated in Inguinal Canal

In *Mil. Surgeon*, Feb., 1932, Major L. E. Likes, M.R., U. S. Army, reports 2 cases in which, at operation, the inflamed appendix was found incarcerated in the inguinal canal. Both patients were male adults.

## Disease and Personality

To treat intelligently a patient afflicted with disease, be it organic or functional, one must make himself thoroughly acquainted with that individual's personality. Personality is a composite attribute which is the result of constitution and psychic make-up and their relation to the environment. An individual's personality also depends on what somatic changes are going on in the body and the relation of these

to the glands of internal secretion and to the body metabolism as a whole. All of these factors are of vital importance in the consideration of the structure of every personality; none of them is independent of each other, and every one of them is influencing all the others.

The structure of a patient's personality is of the greatest significance in the pattern and course which a given disease may assume in that particular individual. Disease is merely a reaction of the patient's personality to noxious stimuli. Successful treatment of a disease demands treatment of the patient as an individual and consists of a disintegration and correction of a vicious circle. In many, if not in a large majority of cases, the easiest or only place at which such disintegration and correction are best begun is the point where mental factors come into operation.—DR. M. KESCHNER, of New York, in *Med. Times & Long Island M.J.*, Oct., 1931.

### Differentiation Between Thyrotoxicosis and Menopausal Disturbances

If the differential diagnosis between thyrotoxicosis and the menopause cannot be made by the history, physical examination and careful use of basal metabolic rate determinations, therapeutic trials of the follicular hormone are indicated. Thyroidectomy may well be followed by hormone therapy (about 20 units in 24 hours) where the two conditions co-exist.—DR. E. L. SEVRINGHANS, of Madison, Wis., in *Endocrinology*, Nov.-Dec., 1931.

### Otitis and Otagia in the Teething Child

Otagia, associated with injection and reddening of the tympanic membrane and of the adjacent wall of the external auditory canal, often accompanies teething disturbances in children. This otagia, in the absence of active infection of the middle ear, is a reflex sensory disturbance, due to the irritation of the gum by the erupting tooth; it can be cleared up temporarily by blocking the afferent nerves at the site of the lesion or at more remote points.—DR. E. M. JOSEPHSON, of New York, in *Am. J. Dis Child.*, Nov., 1931.

### Lymphocyte Count and Prognosis

In 50 cases of lobar pneumonia there were 17 deaths and 33 recoveries. In the fatal cases there was an average 76.5 percent lymphopenia and an average 23.5 percent lymphocytosis; in the recoveries the corresponding figures were 54.5 percent and 45.5 percent. Lymphopenia, in spite of high leukocytosis, indicates a bad prognosis in acute infections.—DR. C. C. CARPENTER, of Wake Forest, N. C., in *Southern M. and S.*, Jan., 1932.

### Epidemiology of Scarlet Fever

Significant clinical differences exist among scarlet fever patients, which permit practical modification of isolation. The efficiency of two methods of release after scarlet fever has been studied at Detroit over several years. One method represented the accepted practice—an isolation period of 28 days for uncomplicated cases, and release of patients with complicated cases thereafter, on clinical recovery, with a maximum restriction of 56 days. The second method included the same minimum requirements for uncomplicated cases, but patients with complications were released when two successive cultures from the affected part were free from streptococci. It was found that the infecting case rate was essentially the same under the two conditions.—DR. J. E. GORDON, of Detroit, in *J.A.M.A.*, Feb. 13, 1932.

### Fuel of the Brain

The work of Himwich and Rose, Holmes and Ashford, Nahum and Lennox, shows that the sole fuel of the brain is carbohydrate. Even in the absence of insulin in the system, the brain burns no fat, but utilizes dextrose in the form of lactic acid.—Editorial in *J.A.M.A.*, Jan. 16, 1932.

### Food Deficiency and the Eye

One of the most constant signs of food deficiency is the pigmentation of the conjunctiva and the reduction of the light sense. The retina stores vitamin A, and avitaminosis causes an increase of lipoids in the rods of the retina and decreases the visual purple.—DR. LAURA A. LANE, of Minneapolis, in *J.A.M.A.*, Feb. 27, 1932.

## NEW BOOKS

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*Books are windows in the world of thought and by opening them we are enabled to gaze into that universe of the unknown which lies beyond the boundary of the commonplace.*—MANLY P. HALL.

### Goldberg: Tuberculosis Control

**PROCEDURES IN TUBERCULOSIS CONTROL:** For the Dispensary, Home and Sanatorium. By Benjamin Goldberg, M.D., F. A. C. P., F. A. P. H. A., Associate Professor of Medicine, University of Illinois. Published by F. A. Davis Company, Philadelphia, 1933. Price \$4.00.

This outstanding book begins with a preface that is unusual. It carries a message and a brief history of the dispensary and sanatorium. It classifies the present-day conception of the sanatorium as a part of the tuberculosis organization—a scientific institution, designed primarily to serve the community.

The text is divided into three sections. Section 1 is devoted to evaluation and diagnosis of the tuberculosis problem; to legislation; and to the dispensary and its activities. Section 2 considers home treatment and sanitation. Section 3 considers the sanatorium, with 22 chapters devoted to its various phases of service and activity.

There are 42 illustrations—tables, charts, dispensary and sanatorium floor plans, form cards and letters used in municipal tuberculosis work, actual photographs of patients, and the like.

The tuberculosis problem is gone into in detail, with consideration of the Negro, the Mexican, the Indian, the Filipino and the Puerto Rican.

Under "Living Standards and Tuberculosis," the fact is elaborated on, that living conditions exercise a great influence on susceptibility to tuberculosis. For instance, dietic fads have led to a marked increase in tuberculosis mortality among girls and young women. The author stresses housing as an important factor in the treatment of tuberculosis among cheap laborers, and states that a severe economic crisis exercises the same influence on tuberculosis mortality as does a war—it increases. He gives excerpts from the Glackin Act, which enables municipal tuberculosis work to be carried out so successfully in Illinois.

A chapter is devoted to coercive legislation—measures necessary to quarantine or force the patient with open tuberculosis to accept treatment, or otherwise keep him from being a continual source of infection by prohibiting him from handling food supplies, groceries, etc. The various phases and activities of dispensary, home and sanatorium treatment make interesting reading.

As stated in the introduction by Dr. David J. Davis, Dean of the University of Illinois College of Medicine, "The author is especially well qualified, from a wide and extended experience in this field, to present this important subject. For over 20 years he has been active in all phases of antituberculosis propaganda. For three years he was engaged in resident sanatorium medical work; for almost 10 years he was in active charge of tuberculosis dispensaries in Chicago; and for over four years, director of all the Municipal Tuberculosis Organizations of the City of Chicago, including dispensaries and the Sanatorium. During this time, too, in addition to administrative duties, he was engaged in promoting medical teaching in tuberculosis in Chicago and in stimulating study and research activities."

Doctor Goldberg's book makes clear the satisfactory application of procedures in tuberculosis control. All physicians, nurses and public health workers interested in or connected with control work should read and study it. He has done the medical profession a commendable service by giving it the benefits of his wide experience. His book will become the working and reference manual of all professional workers engaged in municipal tuberculosis activity.

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### Feinberg: Asthma and Hay-Fever

**ASTHMA, HAY FEVER AND RELATED DISORDERS.** A Guide for Patients. By Samuel M. Feinberg, M.D. Published by Lea and Febiger, Philadelphia, 1933. Price, \$1.50.

This little book considers the common allergic disorders of asthma, hay-fever, eczema, urticaria, migraine, etc., with most of the text devoted to asthma. It is written for allergic patients and their families, to enable them to cooperate with the physician by understanding some of his problems in managing a case and thus make them less prone to turn to the promises and remedies of quacks and charlatans. The author goes into the subject of asthma fairly thoroughly, with consideration of the constitution and heredity, and secondarily with other factors, in Chapter 3, and then discusses the primary causes of attacks (foods, epidermal substances, pollens, drugs, bacteria) in Chapter 4. In Chapter 7 he gives instructions for the use of epinephrin, stating that the proper dosage will depend on the physician's study of the

case. These matters are fundamental and certainly will increase the patient's trust and confidence in the medical profession, even though it will predispose to lay treatment in some cases. The book is clearly explanatory and the author holds to his statement in Chapter 5 of not giving any detailed instructions to the public, in order that they may diagnose or treat their conditions. The book fills a special need, to some extent, as do the handbooks for patients with diabetes mellitus. Doctors can recommend it as a general source of the information which all patients with allergy should have about such disorders.

### Thoma: Dietetics

**FOOD IN HEALTH AND DISEASE.** Preparation, Physiological Action and Therapeutic Value. By Katherine Mitchell Thoma, B.A. Published by F. A. Davis Company, Philadelphia, 1933.

The author's position as Director of Dietetics, Michael Reese Hospital, Chicago, entitles her to write such a book with authority for what she says and recommends. In Part I she discusses food nutrients, together and singly, explaining the necessary points about them and their digestion and body uses. One chapter is devoted to vitamins and the deficiency disorders which they prevent and cure; another chapter to milk as the most important single food; several pages are given to consideration of the values of average servings and measures of foods. Diets are then outlined in some detail for infants and children. Parts II and IV are devoted to diet in disease, including the usual conditions met with in medical practice. Part III is devoted to preliminary dietetics, the preparation of meats, vegetables and desserts. The author ends with an outline of classes for nutrition and diet in disease. The book is intended especially for nurses, but is a mine of information for anyone interested in foods and diets. It is written in a plain, straight-to-the-point manner, with every paragraph full of facts. Apparently nothing has been overlooked. Every practitioner will find it a valuable and easy source of reference.

### Medical Education

**THE FINAL REPORT OF THE COMMISSION ON MEDICAL EDUCATION.** From the Office of Willard C. Rappleye, A.M., M.D., Director of Study, 630 West 168th Street, New York City. 1932.

The Commission on Medical Education was organized in 1925, by the Association of American Medical Colleges, to make a study of the educational principles involved in medical education and licensure and to make suggestions for any changes indicated. Since then the question has been studied thoroughly, with publication of the findings in this volume. The studies refer to medical education in the United States, Canada and Europe, with attention to past and present methods of education and to the probable trends of the future.

In the United States medical education has only recently entered the phase of its evolution toward a university discipline. This has gradually evolved from the early days of apprenticeship as the usual way of obtaining the privilege to practice, and from the days when clergymen were taught medicine as part of their ministerial training, so that they could attend to body ills and injuries as a sideline.

One chapter is devoted to postgraduate education, with consideration of easy specialization in the United States, as compared with some European countries—for instance, Norway and Denmark—which have definite requirements for specialists. In the past 25 years, preparation and requirements for specialism have offered the same problem in America that the training and licensing of physicians did in the apprenticeship days. Now that standards can be set, they are necessary for the good of the profession. There is already a trend toward specialization requirements in the United States and Canada.

The medical course in the United States is taken up and considered by subjects, with suggestions as to how they should be taught. The tendency now is to lengthen medical training in some instances to eleven months in the fourth year, instead of the usual eight or nine, or otherwise. Consideration is then given to the medical course and specialization in Europe. The regular medical course there requires from 5 to 7 years.

The chief advantage of this book is that it presents the main facts on medical education, so that anyone interested can obtain them easily. It also considers, to some extent, the problems incident to medical care. It will be of interest chiefly to those concerned with medical education.

### Dunlap: Habits

**HABITS; Their Making and Remaking.** By Knight Dunlap, Professor of Psychology, Johns Hopkins University. New York: Horace Liveright, Inc. 1932. Price \$3.00.

The author of this book has attempted a very difficult task in endeavoring to set forth his opinions regarding habit formation and to evaluate systematically the large mass of experimental results, in learning and the theories of learning, which have been advanced, with the idea of correlating data and theory. This presentation involves the inclusion of a large amount of material which is "over the head" of the average lay reader who has not kept pace with the modern psychologists, including many physicians, and yet which must necessarily be included in support of his theories regarding the making and remaking of habits.

The reader untrained in psychology will do well to read the first seven chapters last. The fifth chapter, which in all probability will prove the most illuminating to students of psychology, will only tend to confuse those persons whose minds are not accustomed to thinking along these lines, and had best be omitted. There is an extensive appendix, which is chiefly bibliographic, but in which the author has included some historical and theoretic data which may answer some of the questions that will occur to the reader.

Here is a book that should excite interest in the whole subject of learning and challenge serious readers to the consideration of its still-unsolved problems, instead of accepting a dead set of formulas, as the author has challenged the older idea, that certain things have been settled forever, with the implication that the truth we seek is not petrified but is all change, process and growth and is constantly moving ahead.

There is an urgent need for a usable psychology of this sort—one free from superstition and clap-trap—and it is to be hoped that Professor Dunlap's treatise will stimulate further work along the same line by his confreres and thus advance the progress of learning, which is still in an elementary stage.

L.M.C.

### Creative Science

**CREATIVE SCIENCE; A Scientific Basis for a New Religious Philosophy.** By "A Modern Job." Chicago: The Lake Shore Press. 1932. Price, leather, \$5.00; cloth, \$3.00.

One rather wonders why the author of this sound and enlightening book chose to veil his identity under a *nom de plume*. Perhaps he had to protect a high position from the attacks of materialistic "scientists," but he backs up his position by well-chosen quotations from the world's great thinkers, from Aristotle, through Kant, Descartes, Thompson, William James, Darwin, Emerson and scores of others, to Einstein, Freud, Compton, Jeans and Millikan.

In his foreword he says that "Creative Science seeks to harness actuality to possibility; reason to imagination; science to mysticism"—and he seems to have accomplished it. But he talks to those who think free; for "Out of the blackest moment of materialism, new hope comes to one who has been divested of his orthodoxy."

One of his main theses is that group thinking is out. Each man must discover the truth and God for himself. This seems to be an ambitious but rather successful attempt to indicate the path along which such discoveries can be made. "The New Religion must be one that will satisfy the intellect, as well as the emotions."

Those who are settled in orthodoxy and are content with a static universe and a revelation made once and for all, and who dread to have long-held and irrational convictions jolted, are warned against reading these well-printed and exciting pages; and so are those who fear to follow a new idea into its lair, for this man says such things as that he who would be free from materialistic laws must rise above his present space consciousness, and that disease is a result of short-circuiting the Spirit.

The man or woman who is dissatisfied with the outdated creeds, dogmas and superstitions and all the chaotic and unreasonable philosophy of the materialists, and has the courage and the appetite to feed upon strong meat and to use the mind vigorously, will find in this book refreshment and nourishment and a thrill that will last.

### Pusey: History of Dermatology

**THE HISTORY OF DERMATOLOGY.** By Wm. Allen Pusey, A.M., M.D., LL.D., Professor of Dermatology Emeritus, University of Illinois; formerly President of the American Dermatological Association and of the American Medical Association. Springfield, Ill., and Baltimore, Md.: Charles C. Thomas. 1933. Price \$3.00.

This is the first history of dermatology written in English. Others available have been translated from foreign languages. Doctor Pusey covers the subject fully, beginning his narrative with the year 3000 B.C. Each country and period is given credit in the development of dermatology as deserved through its medical leaders. Practically one-half of the book is given to the developments since 1850, with consideration of the men who established it in the United States.

It is interesting to note that the first institution for the care and treatment of skin diseases in the United States was the Broome Street Infirmary for Diseases of the Skin, established in New York City by H. D. Buckley and John Watson, in 1837.

The book is well written in an easy-to-read style, containing good cuts of many dermatologic leaders and the title pages of early books published on skin diseases. It is aptly dedicated "To the Younger Generation, in whose hands lies the future of Dermatology." The last section, "An Historical Index of Dermatology," is an answer to the prayers of reference seekers. Much credit is due for this one feature.

Doctor Pusey's labors will be appreciated by all medical readers. His book will appeal particularly to dermatologists, but it has a general interest for all practitioners of medicine. It is an outstanding addition to medical literature.

### Hözl: Volumetric Analysis

**ANLEITUNG ZUR MASSANALYSE.** Eine Einführung in Die Elemente Der Theorie und in Das Praktische Arbeiten für Studierende Der Chemie und Pharmazie. Von Dr. Franz Hözl, Dozent für Anorganische, Analytische und Physikalische Chemie an der Universität Graz. Mit 6 Textabbildungen. Leipzig und Wien: Franz Deuticke. 1933. Price M 4.—.

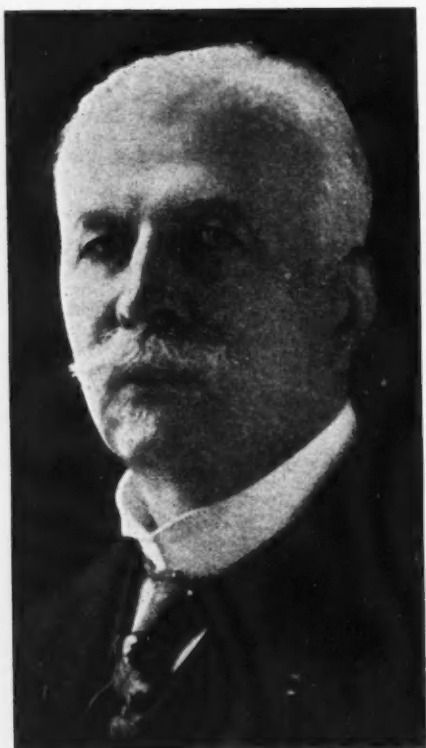
This work is intended as a textbook for students of chemistry and pharmacy, but more material is included than is usually presented to students in this country, in the elementary course. Each type of titration reaction is treated separately. First, sufficient theoretic basis is given for an understanding of the principles involved, after which brief directions are given for carrying out illustrative analyses.

The book should be most useful to teachers of quantitative analysis, who read German; and for physicians who are doing their own laboratory work, it might prove a useful reference for fundamental theories which they have forgotten.

M.B.M.

## MEDICAL NEWS

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From, Münch. med. Wchnsch.

### The Passing of Dr. Babinski

**I**N November, 1932, the internationally-known neurologist, Dr. Joseph F. F. Babinski, of Paris, France (the city of his birth), passed to his rest, at the age of seventy-five years, after a long and useful life.

Dr. Babinski was of Polish origin, and spent his entire life in France. He was one of Charcot's most brilliant pupils and devoted his professional career to the study and practice of neurology, adding much to the

world's knowledge in his field, notably the pathognomonic reflexes which bear his name.

In his last years he suffered from Parkinson's disease, which he had feared all his life.

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### Medico-Military Training at Ann Arbor

**T**HE Medical School of the University of Michigan offers a medico-military course of inactive duty training to officers of the Medical Reserve Corps, April 16 to 29, inclusive, 1933. There will be no charge for the graduate instruction, but trainees will pay their own transportation, board and lodging and will be required to attend the military classes, for which they will receive a credit of 100 hours toward promotion.

For full particulars address Headquarters Sixth Corps Area, 1819 W. Pershing Road, Chicago, Ill.

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### Illustrated Contraceptive Technic

**A** STILL film illustrating the exact fitting of the vaginal diaphragm by the physician, as well as the use of the method by the patient, is now available. The history and manufacture of diaphragms are also dealt with, together with a consideration of vaginal jellies. Physicians who view this film will gain some additional points on contraceptive procedure which will prove helpful in their practice.

Showing of the film can be arranged before medical groups, without charge, by writing the Research Department of the Holland-Rantos Company, 37 East 18th Street, New York.

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### Locations Wanted

**W**E FREQUENTLY receive letters from physicians who are looking for locations, either with or without something to be purchased (generally the latter), and shall be glad to hear from anyone who knows about such openings, preferably in the smaller towns. Those who give us such information will be doing a real service to professional brothers who are in difficulties.

# SEND FOR THIS LITERATURE

To assist doctors in obtaining current literature published by manufacturers of equipment, pharmaceuticals, physicians' supplies, foods, etc., CLINICAL MEDICINE AND SURGERY, North Chicago, Ill., will gladly forward requests for such catalogues, booklets, reprints, etc., as are listed from month to month in this department. Some of the material now available in printed form is shown below, each piece being given a key number. For convenience in ordering, our readers may use these numbers and simply send requests to this magazine. Our aim is

to recommend only current literature which meets the standards of this paper as to reliability and adaptability for physician's use.

Both the literature listed below and the service are free. In addition to this, we will gladly furnish such other information as you may desire regarding additional equipment, or medicinal supplies. Make use of this department.

When requesting literature, please specify whether you are a doctor of medicine, dentist, medical student, or registered pharmacist, or a nurse.

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| H-392 | Arthritis. Its Classification and Treatment. Battle & Co.                             | H-636 | Science's latest contribution to female sex hormone therapy—Progynon. Schering Corporation.         |
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- H-725 The Hormone — April, 1933 The Harrower Laboratory, Inc.
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